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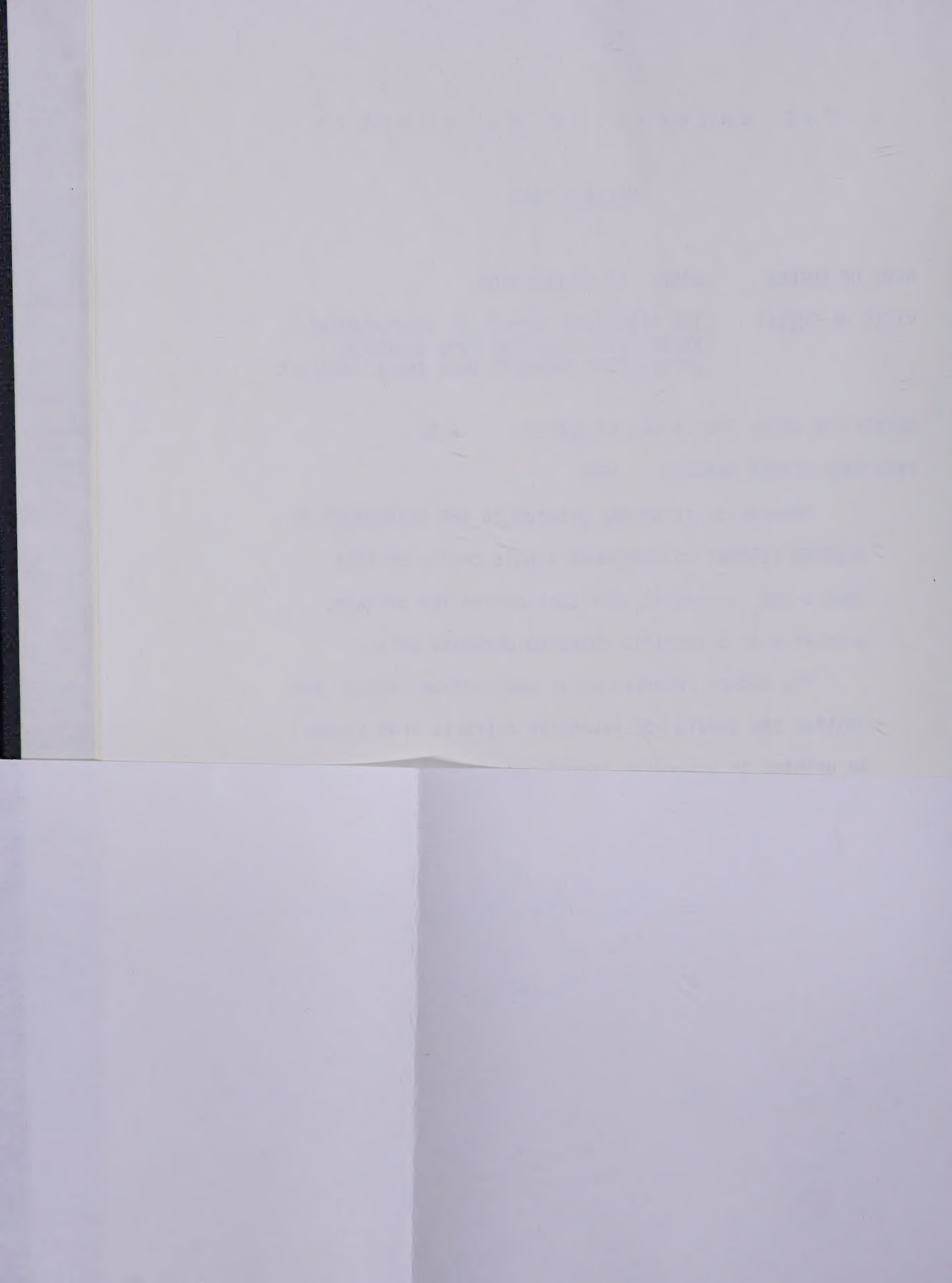
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THE PERCEIVED IMPACTS OF DISPLACEMENT-RELOCATION RESULTING
FROM RESOURCE DEVELOPMENT PROJECTS UPON RURAL FAMILIES

by

 CAREY L. JOHANNESSON

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTERS OF SCIENCE

IN RURAL SOCIOLOGY

DEPARTMENT OF RURAL ECONOMY

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THE UNIVERSITY OF ALBERTA
FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and
recommend to the Faculty of Graduate Studies and Research,
for acceptance, a thesis entitled .THE.PERCEIVED.IMPACTS...
OF DISPLACEMENT-RELOCATION RESULTING FROM RESOURCE.....
DEVELOPMENT PROJECTS UPON RURAL FAMILIES.....
submitted byCAREY L. JOHANNESSON.....
in partial fulfilment of the requirements for the degree
of MASTER OF SCIENCE in Rural Sociology.

DEDICATION

To JAN for the support she has given over the past five years, both encouraging and allowing the completion of my studies.

To my parents, Leifur and Esther, for their faith, trust and encouragement over the past 30 years.

To the rural communities in Alberta yet to feel the impacts of resource development in the hope that it may provide assistance.

ABSTRACT

Rural families have been displaced by resource developments many times in the past in Alberta. The rate at which it will occur in the future, though, promises to increase significantly. The major goal of this thesis was to investigate past displacement and relocation experiences in Alberta and elsewhere in order to provide recommendations for improvements to the process. In this research, a conceptual framework was developed of the displacement-relocation process. Information from an extensive review of displacement and relocation experiences across Canada and the United States, and interview data from the Keeyik Power Development in Alberta was gathered and analysed. Implications were drawn from those findings, and a number of recommendations were formulated. The study concluded that a new, innovative and more comprehensive process for accomplishing relocation was necessary if post relocation problems were to be minimized. The use of a request for proposal procedure for project site selection was recommended. An overall philosophy of ensuring that families were left in as good as or better than that which they enjoyed prior to their displacement was a central theme in the study recommendations.

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CHAPTER I

BACKGROUND AND THE PROBLEM

Background: Energy Demand and Supply

Over the past 20 years, industrialized countries throughout the world have increased their consumption of energy dramatically. During the 1960s, overall energy use grew, on average, five to six percent per year. The demand for electricity increased even more rapidly, averaging over seven percent annually between 1958 and 1972 (Lovins 1977).

Alberta's demand for energy and specifically for electricity mirrored that of most industrialized countries in those years. Between 1961 and 1977, electric energy demand in the Province increased an average of 10.3 percent per year. While that historic rate of growth in the demand is not expected to continue in the Province, electric energy requirements are expected to increase 6.8 percent per year through to 2006 (Electric Utilities Planning Council 1977).

The increased demand for electricity has, in part, resulted from changing lifestyles, the increased use of electrically operated labour-saving devices, increased industrial and commercial growth along with a concomitant requirement for electricity, and a switch from the use of other forms of energy to electricity. Increased residential demand for electricity, resulting both from new uses, and from a substitution of other energy forms, is expected to account for a significant portion of that increase (9.3%). However, increased commercial and industrial demands are likely to contribute the bulk of

FIGURE 1
FORECAST OF ALBERTA ELECTRIC ENERGY RESOURCE
REQUIREMENTS: 1977, 1991 AND 2006



Source: ERCB 1978:12

TABLE 1

GENERATION DEVELOPMENTS EXISTING
IN 2006

	MW	1981 STATUS ¹
Sundance 4, 5 & 6	1,097	E
Keepikills 1, 2, 3 & 4	1,485*	C
Battle River 5	375	E
Clover Bar 4	171	E
North Saskatchewan Hydro	475	E
Bow River	250	E
Sheerness	722	C
Genesee	1,444*	P/C
Camrose/Ryley	2,166*	P
Dunvegan	450 - winter capability - 1000 installed	P
Mountain Rapids	1,500	P
Judy Creek North	1,444	P
Ardley North	2,166*	P
Bow City - Kitsim	1,000*	P
Isle Lake	1,440*	P
Peaking	1,000 - multiple gas-fired generators	P
Pipestone	750*	P
Battle River Ext.	722	E
South Ardley	2,166*	P
Fox Creek	722	P
	<u>21,541</u>	

- Note: 1. E - existing, P - proposed, C - under construction
 2. Firm Load Forecast - 17,287 MW
 3. % Reserve - 25.0%
 4. MW - Mega watts (1,000,000 watts)

*Projects in agricultural areas which, in the future, will require the displacement-relocation of existing residents (total 11,153 MW).

Source: Electric Utilities Planning Council, 1979: Schedule B-2 and C. Johannesson

the increased electrical requirement (75.9 percent). In total, the consumption of electrical energy in Alberta is expected to increase 500 to 600 percent from 1976 to 2006 (Electric Utilities Planning Council 1977; Energy Resources Conservation Board 1978:5.6).

In 1977, most of Alberta's electricity (nearly 90%) was produced from coal-fired thermal electric power plants. Approximately 85% of the Province's power is expected to be produced in the same manner in 2006 (ERCB 1978:5.6). Figure 1 indicates the relative proportion of electricity produced from coal and from other fuel sources for 1977, 1991 and 2006. The electric generating facilities projected to exist by 2006 are listed in Table 1 and their locations are illustrated in Figure 2.

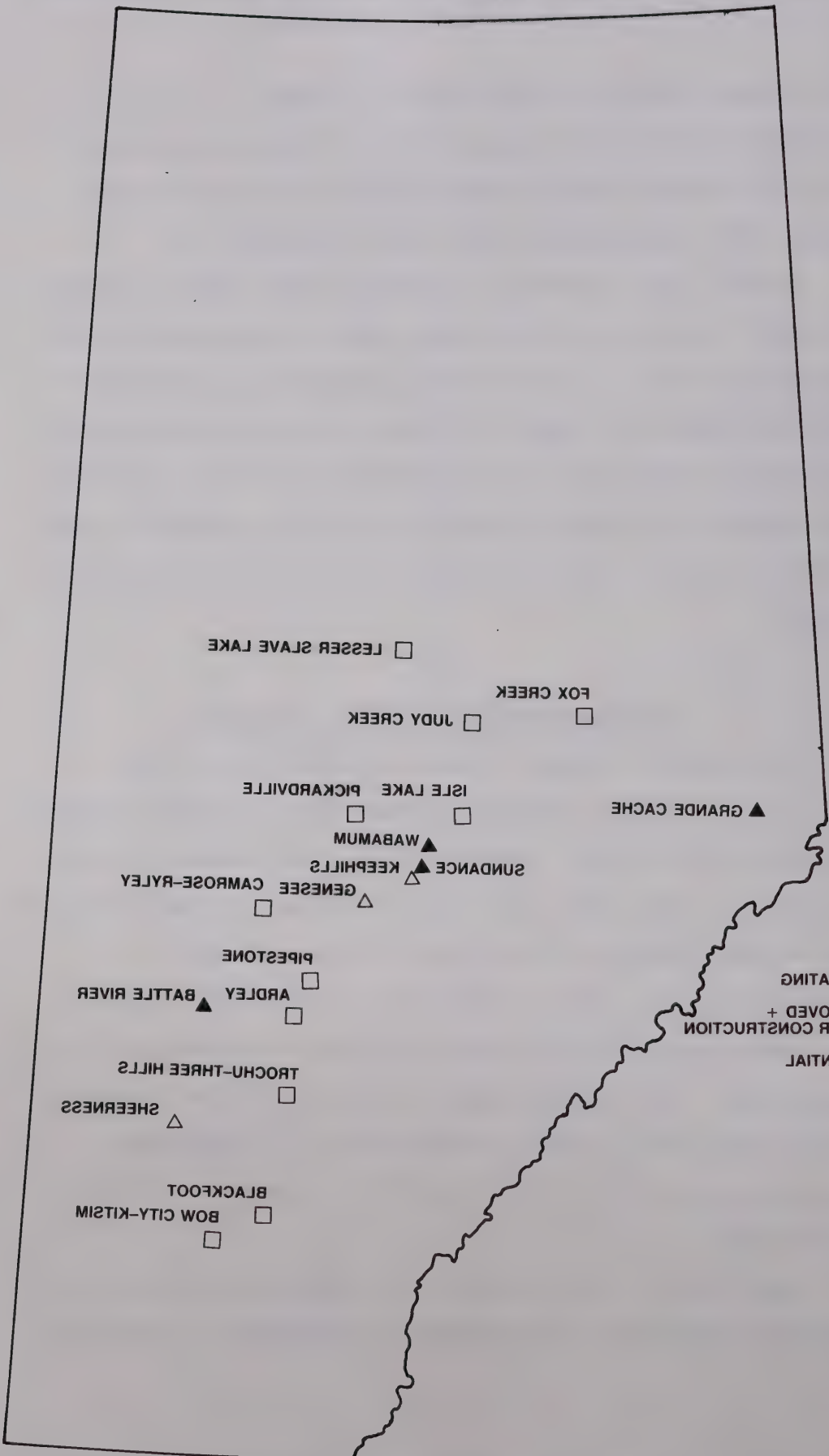
Land Use Conflicts: New Uses Versus Old

The location of the coal reserves targeted for use in the production of Alberta's electricity between now and 2006 pose potential problems for the Province. Overlaying some of those coal reserves are agricultural lands, some of which rank as the best in Alberta for grain and livestock production (See Figure 3). Because of their productivity, those areas are also heavily populated (See Figure 4). The technique used in mining those coal reserves involves open pit, or strip mining. That technique requires removing soils and overburden from on top of the coal seams, removing the coal, returning the overburden materials, and reclaiming the lands back to agricultural productivity.

That process is also long term, often involving ten years or more from land acquisition to the beginning of reclamation. In the interim,

FIGURE 2
EXISTING AND POTENTIAL COAL-FIRED ELECTRIC POWER PLANT SITES





EXISTING AND POTENTIAL COAL-FIRED ELECTRIC POWER PLANT SITES

FIGURE 3

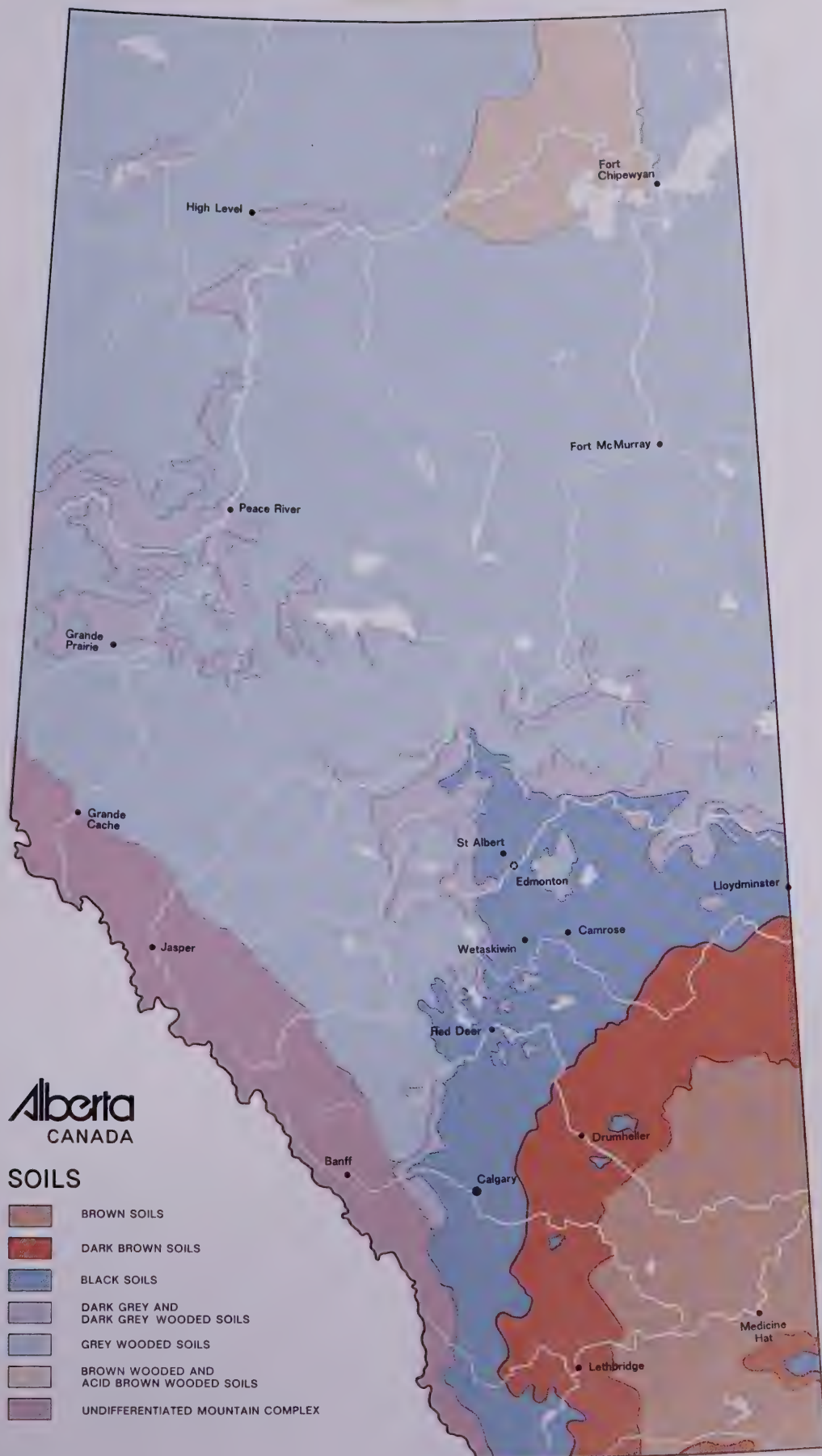
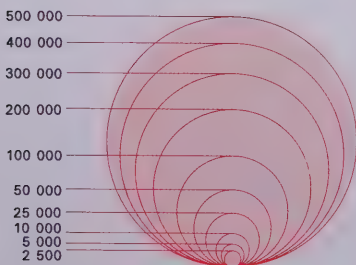


FIGURE 4

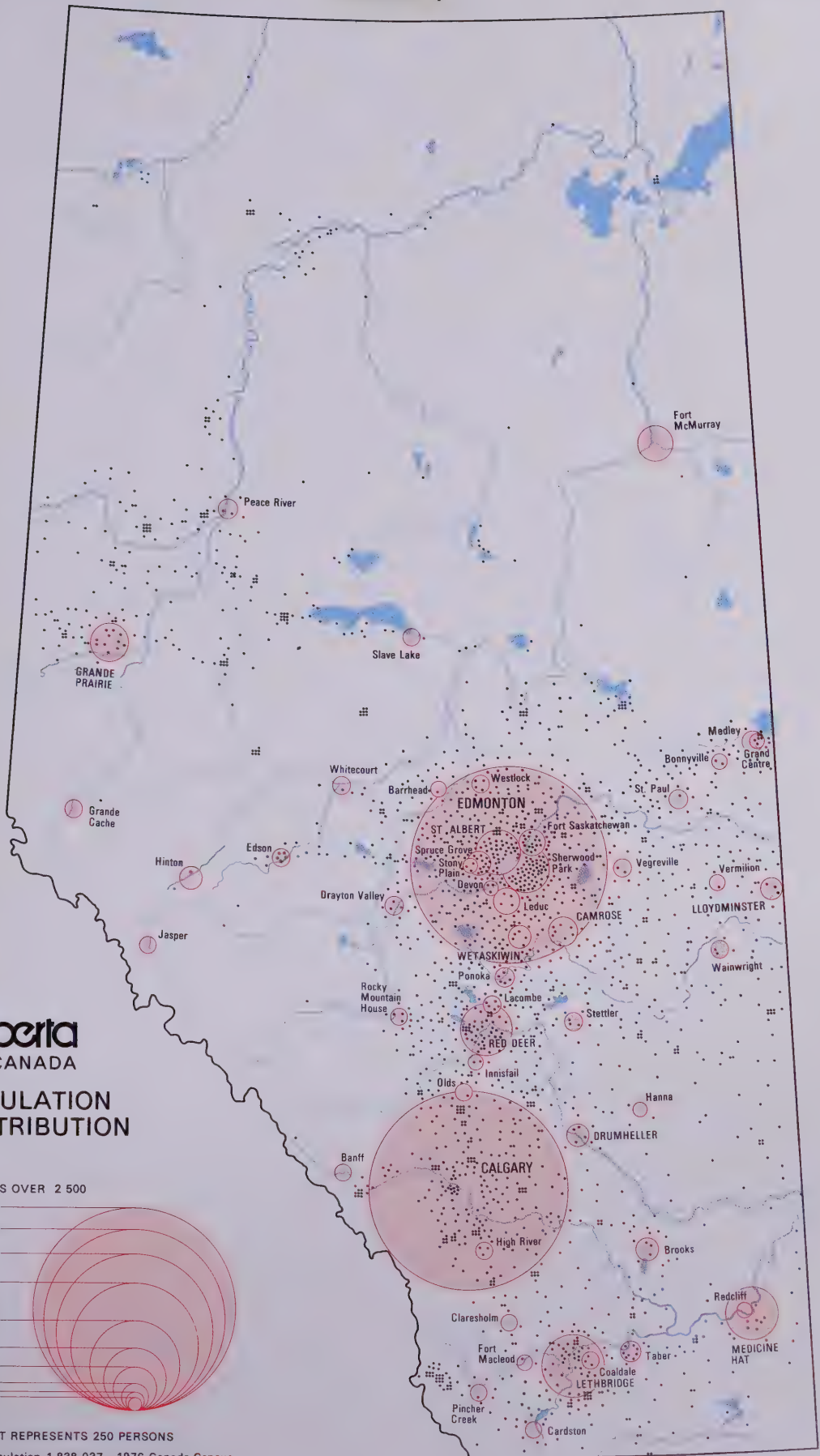
Alberta
CANADA
POPULATION
DISTRIBUTION
1976

CENTRES OVER 2 500



ONE DOT REPRESENTS 250 PERSONS

Total Population 1 838 037 1976 Canada Census



any previous land uses are terminated. For those families farming and residing on the lands overlaying the coal, mining requires ceasing their residency and activities on those lands, and relocating to another area.

Historic Rural Population Movements in Comparison
to Those Resulting From Future Coal Mining

Rural people have in Alberta, as in Canada generally, been historically mobile since the initial settlement period. MacGinnis (1977), Whyte (1970), Skogstad (1979) and Bollman (1980) have examined the previous rural and rural to urban mobility of population in Canada and have indicated that the reasons for that mobility appear to be complex. Various factors, including changes in farm economic conditions and in the structure of farming (for example increased mechanization, and increased economic, social and cultural opportunities in urban areas) and shifts in attitudes towards farming, have caused population movements both to and from rural and urban areas.

In general, however, past forces enhancing the mobility of rural populations in Alberta have been non-specific. The population movements which have occurred and will continue to occur as a result of coal mining in Alberta are different. Families required to move from their communities can easily point to the force behind their relocation - the power company, or the mining company.

The Relocation Experience

Families and individuals who are required to move because of the coal mining in 1981 are generally left on their own to cope with the relocation experience. Once they have reached a land sale agreement with the power company, or their land has been expropriated (or right of entry granted), the families are left to locate a new residence, move and reestablish themselves at the new location. (Appendix 1 outlines the compensation procedures for coal-fired power plants in Alberta.)

No outreach programs or policies exist which would inform the affected families of their legal rights, ensure that the sale price and compensation were fair to them, assist with the relocation and resettlement, help locate and refurbish a home or farm, or listen to and counsel them through the relocation experience. If that occurs, it occurs because the family or its members have actively pursued existing government or private programs and services, hired professionals such as lawyers and appraisers, and enlisted the help of family and friends.

Author's Perspectives

Over the past eight years, the author has been employed in the areas of public participation and social impact assessment relating, in particular, to industrial and resource developments in rural Alberta. In those years he assisted rural people in expressing their views, and becoming involved in the planning and approval of dams, coal mines, power plants and industrial plants.

The problems which beset rural families who were required to move

because of public and private projects were a source of personal, as well as professional concern. In carrying out this investigation, his personal objective has been to instill a sense of humaneness into a process which, in his experience, has often been mechanical, highly bureaucratic, impersonal, callous and insensitive to the needs and problems of people who have been displaced by these projects. In other words, the author seeks to highlight the importance of socio-psychological and philosophical considerations in the implementation of the process of displacement-relocation.

The Problem

Recent Government approvals have been given to coal-fired electric power generating plants at Keephills, Genesee and Sheerness. Others have been proposed but have not yet received that approval. In the process of the development of those plants, a number of families have been displaced.

The process which has occurred in the displacement and relocation of those families may be satisfactory and adequate. That process could also be inadequate and unsatisfactory, from the perspective of those families. Because of the increase in future coal mining and its implications for the displacement of rural families, an examination of the displacement-relocation process would be useful in determining its adequacy, and highlighting any areas requiring improvement. An investigation of that nature would assist in the design of a more satisfactory process for future developments and displacements.

Significance of the Problem

As indicated in Table 1, by 2006, an additional 11,000 megawatts (approximately) of electrical power generating capacity will be required from coal-fired power plants within agricultural areas of Alberta. In their application to the Energy Resources Conservation Board for the Camrose-Ryley project, Calgary Power indicated that over its life, the project would require 35,000 acres of land (approximately) and affect 1,275 individuals in its immediate area of impact. As proposed, that project involved a mine and generating facilities with the capability to produce 2,166 megawatts of electricity on a continuous basis (CP Ltd. 1975:1-5, 2.1).

If that same correlation between project size and the land and population affected holds true for those projects which the Electric Utilities Planning Council project will be in place by 2006, approximately 6,500 individuals and over 175,000 acres of land would be affected by the projects ($\frac{11,000}{2,166} \times 1,275 = 6,475$ people; $\frac{11,000}{2,166} \times 35,000 = 177,747$ acres). While those figures are only

illustrative, the general indication they provide is clear. Over the next twenty-five years, substantial numbers of families and individuals are going to be affected and displaced by coal-fired power plants in Alberta. In addition, coal is also mined in Alberta for export, and proposals have been made to produce electric power for export. Both of those actions would increase the number of families affected by coal mining.

The displacement and relocation of that substantial number of families will create significant effects for rural communities in

Alberta and their residents as well as for those directly affected families. A planned and comprehensive approach to accomplishing successful relocation and adjustment for those families will be essential.

Perceived Verses Actual Impacts

The impacts of the displacement-relocation process may be viewed from either of two perspectives: the actual impacts (as measured through some objective instrument), or the perceived impacts. While the actual impacts are important, the perception of impacts by developers, families and communities involved in displacement-relocation, in large part, determines the attitudes which are formed towards the process, and the actions which are undertaken in response to it. For that reason, the major focus of this thesis is on gaining an understanding of the perceived impacts of the displacement-relocation process, particularly those perceptions of affected families. Consequently, the techniques of measuring impacts used within this research and the studies which are reviewed, examine the displacement-relocation phenomena from a subjective rather than an objective perspective.

Goals and Objectives of the Thesis

Overall, the goal of this thesis is to investigate the phenomena of displacement-relocation in order to provide information on a design and approach which will maximize the successful post-relocation adjustment of those families who are displaced by resource

developments. In order to achieve that goal, a framework of the displacement-relocation process will be developed through the review of a variety of literature on displacement and relocation. Through the use of that framework, the thesis will attempt to accomplish the following objectives:

- (1) to gain an understanding of the types of effects which have been found to occur in displacement-relocation processes in the past,
- (2) to discern what factors relating to the individual, the family and the approach to displacement-relocation influence the degree or type of effects which have been found to develop,
- (3) to obtain an understanding of displacement-relocation experiences in Alberta and to determine whether or not Alberta's experiences are similar to those elsewhere, and
- (4) to identify the approaches and practices required in a displacement-relocation program in order to assure successful post-relocation adjustment of those families being displaced.

Organization of the Thesis

Following the introduction provided in Chapter I, Chapter II examines a variety of literature related to a conceptualization of presentation of a conceptual framework of the displacement-relocation process; a framework which is used in the subsequent chapters to gather and analyze data.

Chapter III provides details on the methods employed in the thesis

for gathering and analyzing the information used in this investigation. In Chapter IV, the results of an extensive review of past studies on displacement and relocation are presented. Chapter V provides the background and findings from five in-depth interviews with families who were affected by the Keepihills power plant development in Alberta. The information obtained from the review of studies and the Keepihills interviews is interpreted and analyzed in Chapter VI. From this material a number of implications are drawn and specific recommendations are developed and presented. The conclusions to the study are provided in Chapter VII.

CHAPTER II

THE COMPLEX PROCESS OF DISPLACEMENT-RELOCATION

TOWARDS A CONCEPTUAL FRAMEWORK

Introduction

From a simplistic perspective, displacement-relocation can be visualized as creating a change to an existing order. Individuals and families, in normal life, reside, interact and are a part of a larger community. Displacement-relocation, as a process, involves removing people from their existing social and physical environment. In order to develop a conceptual framework for displacement-relocation, then, two factors or components of the process must be examined. First, individuals and the families have specific and peculiar characteristics and capabilities. Since no two individuals or families are the same, the way in which they were integrated into their social and physical environments, and the particular capabilities and characteristics they possessed would influence the way in which they dealt with change. Second, the displacement-relocation process for each project would likely vary; the characteristic approaches and practices of each developer would vary, along with company management and personnel. Timing of displacements and distance of moves would also quite likely vary from family to family. In combination, the specific characteristics of each family, and the particularities of their displacement relocation process would determine the degree to which they were affected, the way in which they were affected, and the abilities to adapt to or cope with the specific changes resulting from

their experience.

In developing a conceptual framework for the displacement-relocation process, therefore, each of those three areas has been examined. The phases of displacement-relocation are examined initially, then the implications of possible perceptions, attitudes and characteristics of individuals to the displacement-relocation process are discussed. In the final portion of the chapter, areas of potential impact are outlined. The generalized framework to be used in gathering and analyzing data for this thesis is presented in the conclusion to the chapter.

Displacement-Relocation Defined

Various authors have examined the phenomena of individuals and families being forced to move from their homes and communities and resettle elsewhere. Each author, depending on the focus of his investigation, employed terms to describe the process. Peterson (1970) developed a general typology of migration. According to his typology, the phenomena being investigated here would be referred to as forced migration.

Burdge and Ludtke (1970) examined the displacements which resulted from water resource developments in and around the State of Kentucky. Those authors more explicitly addressed the degree of freedom which existed in choosing a new location. They adopted the term of free, compelled migration - free because the choice of resettlement location existed for migrants, and compelled because those migrants were forced to leave their previous homes.

In this study, two processes are being investigated: displacement

and relocation. Displacement, as used herein, is defined as meaning that families and individuals are compelled to leave their homes; they have lost their legal right to remain and may be physically removed by police action if they do not voluntarily comply. Because of the presence of the displacement factor, families are therefore required to undertake the second part of the process, that is, to relocate. In this research, relocation is defined as including a series of events which involve families locating a new community and home, moving their personal belongings to the new location, and reestablishing themselves after the move.

In real life those two processes may be difficult to separate, or, on the other hand, may be two of many separate actions required in the overall process of leaving one home and re-establishing in another. Some academic researchers, in the past, have attempted for the sake of investigation to divide the two processes, or have dealt with only one. For the purposes of this thesis, the entire process is considered and, therefore, the two concepts - displacement and relocation - have been joined to indicate that the process being studied includes both concepts.

Displacement-Relocation: Stages in the Process

Eisenstadt examined the international relocation and resettlement of Jews in Israel after World War II. He saw the process of relocation as "... the physical transition of an individual or a group from one society to another", involving "... abandoning one social setting and entering another and different one" (1954:1). From his work, Eisenstadt developed a concept of relocation which involved three

phases: the development of the motivation to migrate, the actual move from one location to another, and resettlement at a new location move (1954:1-5).

For the Israeli immigrants studied by Eisenstadt, the decision to move was an individual or family choice. That initial period of decision involved assessing their present life situation, projecting possible futures, making a decision, and then physically preparing to move. Over and above the physical actions which were required during the decision phase (selection of household goods to take and leave, packing, selling or giving away unnecessary items), a number of psychological and sociological events also occurred (gathering information on consequences of staying or leaving). Eisenstadt found that the initial phase in the relocation process was characterized by a period of de-socialization. Families who had historically had a number and variety of social contacts and relationships in their community, pulled socially and psychologically away from individuals outside of the family in preparation for the move. During the move, social interaction was confined largely to the family. The family became the center of social and psychological identity and involvement.

Once at the new location, the family members began to reextend themselves socially and psychologically out from the family into their new environment. Individuals began re-establishing social contacts, reforming a social network and adapting to the social requirements, values and norms of their new community. Only insofar as that entire process was successfully completed were the immigrants able to become fully functioning members of their new society and community.

Eisenstadt found that the first stage, the decision to migrate,

greatly influenced the later stages. That stage, and the way in which it occurred, largely determined migrants' orientation and degree of readiness to accept change throughout the displacement-relocation process.

Eisenstadt's conception of the three stages of relocation could be applied to experiences in Alberta. Some differences do exist, though, between the situations of the Israeli migrants and those in Alberta. The Israeli migrants studied by Eisenstadt were able to make a free choice; the decision to relocate was their own. In Alberta, because of the forced nature of relocations resulting from resource development, the initial freedom of choice is absent. In addition, Eisenstadt examined only those families who moved to one location, Israel. With the Alberta situation, however, families have no predetermined destination and must make a choice among many possibilities. That aspect of the relocation would likely be of great importance in the decision phase for Alberta migrants. Eisenstadt focused primarily on the social and psychological aspects of relocation, but in the Alberta situation, physical and economic changes are at least as important. While the cultural differences between one location and another would likely not be as significant for Alberta migrants as for the Israeli migrants, the other changes that would be required, such as finding new shelter and new employment, would be of paramount importance.

In the decision phase, Alberta families would need to consider a large number of factors including where to relocate, when to move (to a degree), how the move would occur, what employment would be available at the new residence, and whether the same economic activity or business could be maintained. Moving would involve all of the

logistics of relocating personal belongings to the new residence, including all of the associated financial and legal work.

Resettlement would involve making the new residence into a home, meeting and making new friends, locating necessary services and facilities, reinitiating economic activities, and redefining and renegotiating roles, responsibilities and statuses in the family and in the community.

Individual and Family Characteristics

As stated in the introduction to this chapter, a discussion of the characteristics of individuals and families is important in understanding the way in which they are able to cope with and adapt to their displacement-relocation experience. Because of the potential for attitudes to influence a family's approach to displacement-relocation, some possible perceptions towards the process are discussed initially in this section. Following that, a discussion of the characteristics of families and individuals which could affect their ability to cope and adapt to the experience is presented.

Possible perceptions of displacement-relocation

Displacement-relocation could be perceived in a variety of ways, depending upon the position and interests of the individual and the direction and significance of effects upon that person. The process could be seen as a threat, or as an opportunity. It could also be perceived as being legitimate or illegitimate. As Eisenstadt indicated, the way in which displacement-relocation is perceived by those affected greatly influences the success of their relocation.

Displacement-relocation as a threat. Individuals affected by the displacement-relocation process could view the process, or components of it, as a threat. Two factors appear to influence whether or not that perception is developed: a perceived lack of individual control over a future set of events, and a belief that the end result of that set of events will be a lessening or diminishing of the life situation of the individual. For example, a family could view the displacement-relocation process as a threat in total, if they perceived that they lacked a choice in deciding whether or not to move, and saw the relocation as resulting in negative consequences. Their situation could be compared to that of a car driver attempting to avoid an accident, while his vehicle skids out of control towards a telephone pole. The driver has little or no control over the process but can see that that lack of control will likely result in harm to himself, or his property. Both conditions - the lack of control, and the perception of harm - would seem to be necessary (but not sufficient) factors for the experience to be viewed as a threat.

If a family believed that moving would result in negative consequences, but had the choice of moving or not moving, their situation would not likely appear to be threatening. Similarly, if the family did not have a choice of not to move, but saw their life situation to be enhanced by a move, the relocation would not likely be perceived as threatening. Only when both conditions were present would it appear that a perception of the displacement-relocation would be seen as a threat.

Brehm, in his reactance theory, outlined the reactions of individuals to threats which were used to enforce conforming behavior

(Penner 1978). According to that theory, a threat restricts an individual's freedom of action, something to which an individual automatically reacts negatively. The use of a threat results in increased opposition and a dislike of the source of the threat.

Applying that theory to displacement-relocation situations, one would conclude that an affected individual, if he perceived the experience to be a threatening one, could develop an opposition to the project, the relocation, and the agency requiring the expropriation. That perception, in turn, could jaundice the attitude of the individual towards the relocation and, subsequently, jeopardize the success of the relocation.

Displacement-relocation as an illegitimate process. The concept of illegitimacy is grounded in the ethics and values of society, and of the community in which individuals reside. Legitimacy is based on the belief that an action or event occurs in conformity with those values and ethics and that it is logical, just and justified from the perspective of the society and community. Concepts of fairness and equity stem from those same values, and become criteria by which individuals judge the actions of other individuals, groups and organizations within the community.

From that perspective, the displacement-relocation process could be judged by the affected families and their community as being illegitimate in part, or in whole. The displacement-relocation process could be judged and perceived as illegitimate in total, if the need for the displacement was questionable, unproven or illogical from the perspective of the community and of the individual. At a more specific

level, the tactics employed in acquiring land, the compensation paid, and the assistance provided in the relocation could each be judged as being illegitimate if they did not match the expectations community members developed as a result of their value base.

The importance of the perceived illegitimacy or legitimacy of the displacement-relocation process lies in the attitudes and actions affected families develop and undertake as a result of their perceptions. If a perception of illegitimacy results in effective opposition towards a development, delays or abandonment may result. Where the displacement occurs overruling the perception and opposition, those being relocated could approach the relocation disheartened and psychologically handicapped in their effort to achieve successful relocation.

Displacement-relocation as an opportunity or as a problem to be solved.

The displacement-relocation experience could also be perceived by those affected by it as an opportunity or as a problem or a series of problems to be solved. Some of those problems might include whether or not to fight the displacement, where to move to, what to take, what to leave, when to move, how to get household and farm goods to the new residence, and how to reintegrate into the new community.

Scott and Howard discussed the process of problem-solving in their examination of stress. They defined a problem as "... a stimulus or condition that produces demands on the human organism that require it to exceed its ordinary level of functioning or that restrict activity levels below usual levels of functioning" (1970:270). They anticipated that four types of problems could occur; those which stemmed from the



internal physical environment, the external physical environment, the psychological environment or the sociocultural surroundings.

Scott and Howard saw five conditions for the mastery of any problem: 1) the existence of a necessary level of energy that could be directed towards the problem; 2) the presence of the necessary resources needed for problem resolution (both general resources such as intelligence, and specific resources such as appropriate skills, knowledge and tools); 3) the manner in which a problem is posed and whether it is within the abilities of the person to solve the problem; 4) the way in which the problem was interpreted ("... the perception of a problem situation and ultimately the probability of mastery") and 5) the way in which a person responds to the problem. (1970:272).

Responses could be assertive, divergent or inert (the person could either fight against the problem, flee from it, or not react to it).

Under that paradigm, the families affected by displacement-relocation would need to satisfy each of those five conditions in order to complete the problem-solving process. In choosing to oppose the displacement, for example, the family would need to develop and sustain sufficient energy to carry them throughout the opposition, gather the necessary resources together, be in a situation where the opposition could succeed, and interpret the situation and react appropriately to counter opposition and actions. As Scott and Howard indicate, however, throughout that process, the family would be mobilized to a level of activity higher than their normal level, involving a binding up of their resources and energy (in order to direct them towards the opposition), and resulting in increased levels of tension for each of the family members.

The problem-solving process, in this case opposition to the displacement, would result in learning for the family. The newly acquired knowledge could then be used in other situations, increasing the ability of the family to deal with similar future problems.

Where the opposition (problem solving) failed, however, unresolved levels of tension could develop. That increased tension or stress would need to be dissipated through some other mechanism, or would remain within the individual, possibly creating future difficulties.

Scott and Howard, and Selye (1974), from their research emphasized that problem-solving and stress-coping capabilities are highly individualistic. With displacement-relocation, the individual families, and even family members, would vary in their ability to solve the problems associated with the process and cope with the resultant stress which would occur.

The displacement-relocation process could be perceived as an opportunity inviting individual and family reaction. To a certain degree, viewing the process as a problem to be solved implies a somewhat negative orientation; if the problem is not solved, it remains, and the individual is defeated. Viewing displacement-relocation as an opportunity to be taken advantage of implies that the process could result in a positive situation for the family. The possibility could exist for the individual and the family, and their perception could be that they could improve their life situation by taking advantage of the opportunities that the relocation presented.

Family and Individual Knowledge, Skills and Resources

Rogers and Shoemaker (1971) examined the process involved in the

adoption of innovations and outlined a number of attributes characteristic of those individuals who adopted innovations in farming practices earlier than the majority of farmers did. They found that a series of factors related to socioeconomic characteristics, personality, communication and social interaction attributes correlated with the early adoption of innovative practices and ideas. Those characteristics included the following:

(a) Early adopters of innovation tended to share the following socioeconomic characteristics. They were:

1. more educated
2. more literate
3. higher in social status
4. more upwardly mobile in society
5. involved in larger-sized farms, businesses or operations
6. economically oriented toward commerce rather than subsistence
7. more favourably disposed to credit borrowing
8. wealthier
9. more specialized in their business.

(b) Early adopters also tended to share personality attributes.

They were:

1. more emphathizing
2. less dogmatic
3. more capable of dealing with abstract concepts
4. more rational
5. more intelligent

6. more favourably disposed to change, risk, education and science
 7. less fatalistic
 8. more motivated toward achievement
 9. possessed of higher aspirations.
- c) In their communication and social interaction, early adopters shared:
1. higher levels of social participation
 2. higher levels of integration with the social system
 3. a more cosmopolitan outlook (they had traveled and read more about the outside world)
 4. more contact with change agents
 5. greater exposure to mass communication
 6. a more central location in interpersonal communication networks
 7. a tendency to seek more information regarding innovations
 8. a higher degree of opinion leadership
 9. membership in social groups having more modern views
 10. a higher likelihood of belonging to well-integrated systems (1971:183-196).

If the psychological processes involved in the adoption of innovations were similar to those involved in the displacement-relocation process, one might expect to find that the above characteristics would also be typical of those families who were best able to adapt to the displacement-relocation experience. Individuals who were more highly educated, had a higher socioeconomic

status, were wealthier than the average, were more flexible and pragmatic in their thinking, were more highly motivated, were more cosmopolitan in their life experiences and were highly integrated into the outside world, would then be expected to adapt better than most families.

Rogers and Shoemaker also identified from their work five characteristics of innovations which assisted the rate and ease of adoption:

1. relative advantage of the innovation over the existing situation
2. compatibility of the innovation with the existing values, experiences, needs of the adopters
3. the complexity of the innovation and ease of understanding
4. the degree to which the innovation could be experienced on a trial basis, and
5. the visibility of the innovation to others. (1971:22-3).

If the relocation which families were experiencing and were being asked to adopt were to be viewed from the perspective of being an innovation, one might expect to find that if the relocation was seen to result in a better life situation, if it were compatible with the values of the family and community, if its elements were well thought out and easily understood, if the relocation process allowed the family to make trips to the new residence without closing the door to their return, and if the move were viewed by the remainder of the community as being a benefit to the family, the family would be likely to accept the relocation with a positive attitude. The family would also be likely to relocate successfully.

The displacement-relocation process, in summary then, could be perceived by those being directly affected as a threat or as an opportunity, as legitimate or as illegitimate. When perceived as being a threat or as being illegitimate, the process could predispose those families towards an unsuccessful or difficult relocation experience. Conversely, families whose perception of the displacement and relocation process was that of an opportunity, and a legitimate demand, could undertake the tasks and approach the problems associated with the relocation in a positive frame of mind. As previously indicated, the way in which relocated families perceive the relocation process greatly influences their behavior and the success of the relocation.

Rogers and Shoemaker also indicated that individuals and families, depending on their characteristics, would be expected to display differing degrees of adaptive capability. That ability would be closely associated with a number of social and psychological characteristics of the people. The following examination of the potential areas of impact stemming from the displacement-relocation process then must begin with the understanding that the effects could well be modified by those two factors above (the perception of the process by those directly affected, and their individual adaptive capabilities), as well as the peculiarities of their individual displacement-relocation experience.

Displacement-Relocation: Potential Areas of Impact

Relocation involves a move from one physical and environmental setting to another. Because of man's social character and organization, a move of that nature could result in effects ramifying

throughout many dimensions of his life. As Cottrell (1951) has indicated, individuals and families develop a multitude of ties to their communities, including those of a social, economic, psychological and physical nature. Those ties often take the form of jobs, financial investments, friendships, emotional commitments, child rearing, social support for each other, social participation, filling positions of authority within the community and informal social control. Psychologically, people identify with both their physical setting and their social environment (Fried 1964). A separation of family from community, then, may create many impacts. The size of those impacts would depend upon the degree of commitment the family had to their community (Cottrell 1951).

The following discussion examines some possible areas of impacts stemming from a displacement-relocation process. For the purposes of analysis, four major subcomponents are discussed: effects on financial and economic well-being, effects on social life, effects on psychological and mental well-being, and effects on physical health.

Potential impacts on financial-economic standing

Warren (1978), in his research into communities, argued that one of the major functions of community is that of production-distribution-consumption. Each individual member is tied to the community through his production, distribution and consumption of various goods and services. Family members have jobs, business or are engaged in other income-producing activities. Income from those sources is spent on family needs, and invested for future requirements. Displacement-relocation, by removing the family from the community, would disrupt or

fracture many of those economic ties.

The physical move associated with relocation could potentially change the economic circumstances of a family or an individual in the areas of cost of living, level of income or economic resources. Moving requires economic resources. The physical act of moving and acquiring a new home requires time, money and labour, both in locating and in moving. If occupation is tied to locality, as in the case of farming and small business, and the move is too far to allow a continuance of work in that location, moving could result in loss of income in changing employment, or in selling and buying a new operation or business. Similarly, the cost of living associated with living in a particular locality may be less than in another - a move may require an increase in expenditures to maintain a similar life-style. Such would be the case with a family who had a garden or cattle at one location, but not at the new location. The exact opposite of all these circumstances may also occur, and if so, a change of location could result in increased income or economic resources and less expenditure on a day-to-day basis for living and producing income.

On the other side of the relationship, the economic resources available to a relocatee may determine the distance, ease and overall attractiveness of the new location. Persons who have sufficient financial resources may be able to locate in a situation where life would be easier, closer to friends, family and amenities. The relocatees could be generally happier at the new location than at the old one. In some cases, resources may not be sufficient to allow a move to a better location. The new situation could afford less income, greater costs and a less pleasing environment generally.

From this perspective, the issue of compensation takes on greater importance. Where families are required to relocate, the amount of compensation (in comparison to the costs incurred) could make the difference between a successful relocation and a failure. If families were forced deep into debt by a relocation, it could take years until they regained their previous economic position.

Potential impacts on social life

Service (1971), in his discussion of the evolution of social organization, argued that human forms of social organization began with a simple, communal form dedicated to the protection of individual members, and to the propagation of the group. From that simple form, human organization has developed, differentiated and become more complex, such that today the complexity of our multifaceted social organization is enormous. With that development, many of the functions previously provided by the family have been taken over, to a large degree, by other social institutions.

Warren (1978), in his analysis of communities in North America, concluded that communities today provide five major functions for their members: production-distribution-consumption, socialization, social control, social participation and mutual support, with the medium for the provision of those functions being social interaction. Because of the increased dependence of communities and their members and institutions on the larger society, and the extra-community world, however, communities defined on the basis of a physical settlement have lost much of their historic meaning. Many of the functions that communities traditionally fulfilled have been taken over by other

entities such as ethnic groups, functional associations and formal organizations. Warren indicated, however, that the concept of community is still important. Instead of being tied to locality, though, he defined it in terms of psychological identification, reference groups, and as a source of meaningful ties - characteristics which at present often occur in associations which have little relevance to locality. Today, Warren stated, community life exists as a composite of local interaction and interaction with extra-community organizations.

Zimmerman and Moneo in their analysis of Western Canadian prairie communities implied that the forms communities have taken in Western Canadian history have been greatly dictated by the needs of the people at a particular point in time. During settlement, when communication and transportation systems were relatively unsophisticated, families' needs had to be satisfied at the locality. Farm villages developed to meet those needs. With the advancement of transportation and communication systems, and with the increased mechanization and rural depopulation, villages lost their importance as commercial centers to larger regional centers and cities and largely declined. As Zimmerman and Moneo stated, the entire prairie community system "... gradually remodels itself as the technique of rural life is changed, but the balance constantly renews itself"; "... the small prosaic community in the country is as necessary as the city." (1971:64).

As Zimmerman and Moneo, as well as Warren, indicate, rural communities today do not satisfy all of the needs of their citizens. Through the interaction that occurs within them, however, they still do satisfy, to a degree, some of those functions and needs which Warren

(1978), Maslow (1971), Penner (1978) and others have written of, including physiological needs, personal identity, belongingness and love, mutual support, status recognition, role definition, support for self-esteem, social control, social participation, and socialization, even though they may not provide the main source of all those need satisfactions.

In attempting to predict the potential impacts of displacement-relocation upon those families directly affected, one needs to be cognizant of those needs which are tied to the locality (and might therefore be disrupted by a physical move) and those which are satisfied from other sources. The degree of effect that relocation will have on the social interactions of the potential relocatees will depend, then, upon the degree of interaction they have with others in the locality, and will in turn affect the functions and social needs that are being satisfied through those interactions.

Each member and family within a community plays a multitude of roles within a community, has numerous social relationships, is part of a number of informal and formal organizations, and has various needs met by other individuals and organizations. A parent could be a farmer, while also being a county councillor, a director on the board of the local gas co-op, a member of the school board, and a player on the old timers hockey team who was recuperating in the local hospital with a broken leg. His child could be a student, belong to the local 4H club, play on a local hockey team, and be the president of his students' union.

Requiring that the above family relocate out of their community, would result in the fracturing of many ties they had with their

community. Gone would be their membership in many organizations. Both they and their organizations would thus be affected. Individuals would lose the statuses and roles they gained through their membership with those organizations. Those types of memberships, and the associated roles and statuses, would need to be reestablished in their new community in order for the family members to regain their previous life situation. The circle of friends and neighbours the family belonged to, a circle which allowed social interaction, mutual support in times of need, and provided a reference group for the family members to be part of, and relate to, could also be disrupted by their relocation.

If the reference group for one person was located in the old locality, the effects of relocation (if the move was away from the locality) would likely be greater than if that reference group was not located there. On the other hand, if the move resulted in a family being closer to those significant persons, the move, would be positive from the perspective of social interaction. From the perspective of forced relocation, then, if the physical move results in separation from a reference group, aspects of an individual's life may also change. The effects of relocation would, therefore, depend to a large extent on the transferability of an individual from one community to another.

Eisenstadt saw migration as involving a transition from one social setting to another; relocation could also be examined from that perspective. He saw the process as involving a severing of relationships and roles in the old location, a pulling into oneself and one's family during the move, and a reformation and re-extension of

relationships in the new location. Roles which were appropriate in the old location were not necessarily so in the new one. Eisenstadt saw the separation from the old setting as involving a degree of desocialization; "... of shrinkage and transformation of his whole status-image and set of values" (1954:6).

One might expect, then, that the degree of effects from relocation would be related to the congruence between the norms, values, statuses, roles, membership to organizations, and culture generally between the old location and the new. Where those in the old community replicated or were closely similar to those in the new community, the transfer of the above components of social life would logically be easier, and the resultant effects smaller. Where incongruence existed, the effects of relocation would likely be much larger.

If, for example, a farming family retired, as a result of relocation, into an urban area, the husband and wife would both lose their roles respecting agriculture and the operation of the farm. Where their families and friends were located in the old locality, and the activities they deemed to be most personally significant were also carried out in the old locality, one might expect them to be more greatly affected by the relocation than those in other circumstances. Those effects, however, could be altered by the adaptability of the individuals involved.

Potential impacts on psychological-mental well-being

In the initial portion of this Chapter, some possible perceptions of the displacement-relocation process were examined, including the view of it as a threat. If the process were indeed viewed as a threat,

some impacts on the psychological-mental well-being of the family and its members might occur. Some possible reactions could include fear, anxiety, and stress. Each of those, as Selye (1974) has discussed, may lead to generalized feelings, and to other physiological reactions.

Maslow, in his writings on motivation and behavior, proposed a hierarchy of human needs including physiological, safety, belongingness, esteem, and self-actualization needs. Those needs, he argued, form the "... very essence of human nature itself"; they "... are not only wanted and desired by all human beings, but also needed in the sense that they are necessary to avoid illness and psychopathology." (1970:xiii). Satisfaction of those needs, as exemplified by the belongingness, love and esteem needs, depend upon social interaction.

If those needs are being satisfied in the locality in which an individual or family resides, one might expect that relocation would disrupt their satisfaction, and result in impacts on psychological well-being. Those impacts would, however, likely be temporary if the family were able to reestablish the necessary ties and regain the social interaction at the new residence.

Other types of effects which could stem from the displacement-relocation experience would include impacts to individual self-perception. That would be particularly likely where the perception others had of the individual and those he had of himself were diminished as a result of the experience, for example, in a situation where the individual was unable to cope with the demands of the process and began to drink, or had a nervous breakdown.

Potential impacts on physical health

By definition, forced relocation requires a change in an individual's physical environment. That relocation could result in a move from a healthy environment to one less healthy, or vice versa. In addition, changes in physical locations could result in changes in the relative freedom from the possibility of physical harm. A move from a rural to urban environment could exemplify the types of changes that occur to an individual's physical health. Moving, for example, could result in relocating from a rural environment, where dust, noise, traffic, and physical abuse from crimes did not pose major threats to an individual's physical health, to an urban environment where all of those factors were increased. A move could also result in the opposite. For instance, farming may result in health hazards from accidents and from the use of pesticides. Moving away from those hazards could result in an improved physical health.

Interrelationships between major impact areas

Because of the interrelationship of the various components of an individual's life, direct effects from the displacement-relocation experience could result in a ramification of impacts on other areas or components of that person's life. For example, interacting effects could occur between an individual's economic situation and physical health as a result of forced relocation. If relocation resulted in a loss of income (or income in kind such as having a vegetable and meat supply on a farm), a loss of work opportunities or a loss of economic resources, individuals or a family could find themselves in situations where nutritional needs were not met, and their general level of health

suffered. This could be particularly related to the situation faced by older, less well off, relocatees. Conversely, if the relocation resulted in a decrease in physical health, the ability to earn income might also be decreased. Similarly, impacts in the area of social life could result in spinoffs in the economic area, and vice versa.

Rogers and Burdge (1972) have indicated that social status is, in part, dependent upon occupation, income, wealth and the possession of material goods. Loomis and Beegle (1950) have stated that persons of similar status interact informally together, rather than with persons of other statuses. Any change to occupation, wealth or level of material goods stemming from inadequate compensation for relocation could perhaps result in a change in status, and therefore in reference and social group relationships.

Subtle effects of status upon economic standing could also be seen in an example of a situation where an individual left an occupation and retired. Although the primary change there might be one of change in employment status, the effects could also be created by a change in social status and role. Another example is illustrated by the cliché: "It's not what you know, but who you know that counts". Social relationships are clearly seen to be important, and when used in reference to job promotions or obtaining employment, the implication is that an individual's social life can greatly affect his economic situation.

Geoffrey Lalonde (1980), in his book 4 Minutes to the Job You Want, implied the interrelationship between social interaction and obtaining employment when he emphasized the importance of getting involved in a job network (an informal interrelationship of managers

who refer attractive potential employees from one to another), and developing a career advisory group (a reference group who assist an individual in preparing for interviews, refer the person on to potential employers who are in their circle of acquaintances, and act as an advisory group in assisting the individual to clarify career goals and objectives). If a person does not have those social relationships, the possibility of finding a job or of obtaining a high level of financial remuneration could be lessened.

Similarly, the psychological, mental well-being of an individual is also related to his circumstances. If an individual, because of anxiety, frustration, fear or lack of motivation, is unable to perform work, his income could diminish, resulting in a decreased financial situation. Conversely, losing a job or having a financial setback (a situation which could be created because of a relocation) could result in increased anxiety, disheartenment and fear.

If an individual did lose his job or business, other areas of his life could be impacted, as well. His degree and desire of social interaction with others could diminish, resulting in a deterioration in his previous social status and roles. The physical health of the individual might also suffer if the degree of anxiety resulting from his changed situation reached a significant enough level. Selye (1974), in his work on stress and its impacts upon physical health, outlined stress-related medical conditions including ulcers and general health deterioration.

In general, as illustrated in the above discussion, the various components of an individual's life are closely interconnected. A relocation-related impact which directly affected one aspect could

easily ramify into other life areas. Even more complex and interrelated impacts might also result; however, with each successive level, the effects would become more and more difficult to discern and to evaluate. The first priority task for a relocation program would, therefore, be to identify and alleviate those direct or first order effects, and, if and where possible, deal with the secondary level afterwards.

Summary: Conceptual Framework of Displacement-Relocation

The previous discussion has focused on three major topics in an examination of the displacement-relocation process: (1) phases in the process, (2) characteristics and perceptions of individuals and families which might influence the level and degree of impact, and success of post-migration adjustment, and (3) potential areas of impact by the process upon the lives of those individuals affected by it.

In an examination of the process, displacement-relocation was seen to involve three sub-components: determining the requirement to move (from finding out about the possibility, to confirming that the relocation was required), finding and moving to a new location, and resettling in a new community. The perception those affected by the displacement-relocation process had of their experience was believed to be important because that perception was thought to greatly influence the manner in which the individuals approached problems that developed throughout the process. When the process was seen as being a threat, the individual could be expected to approach the relocation tasks with little determination, and a reduced chance of success. If the perception was that of an opportunity, however, individuals could be

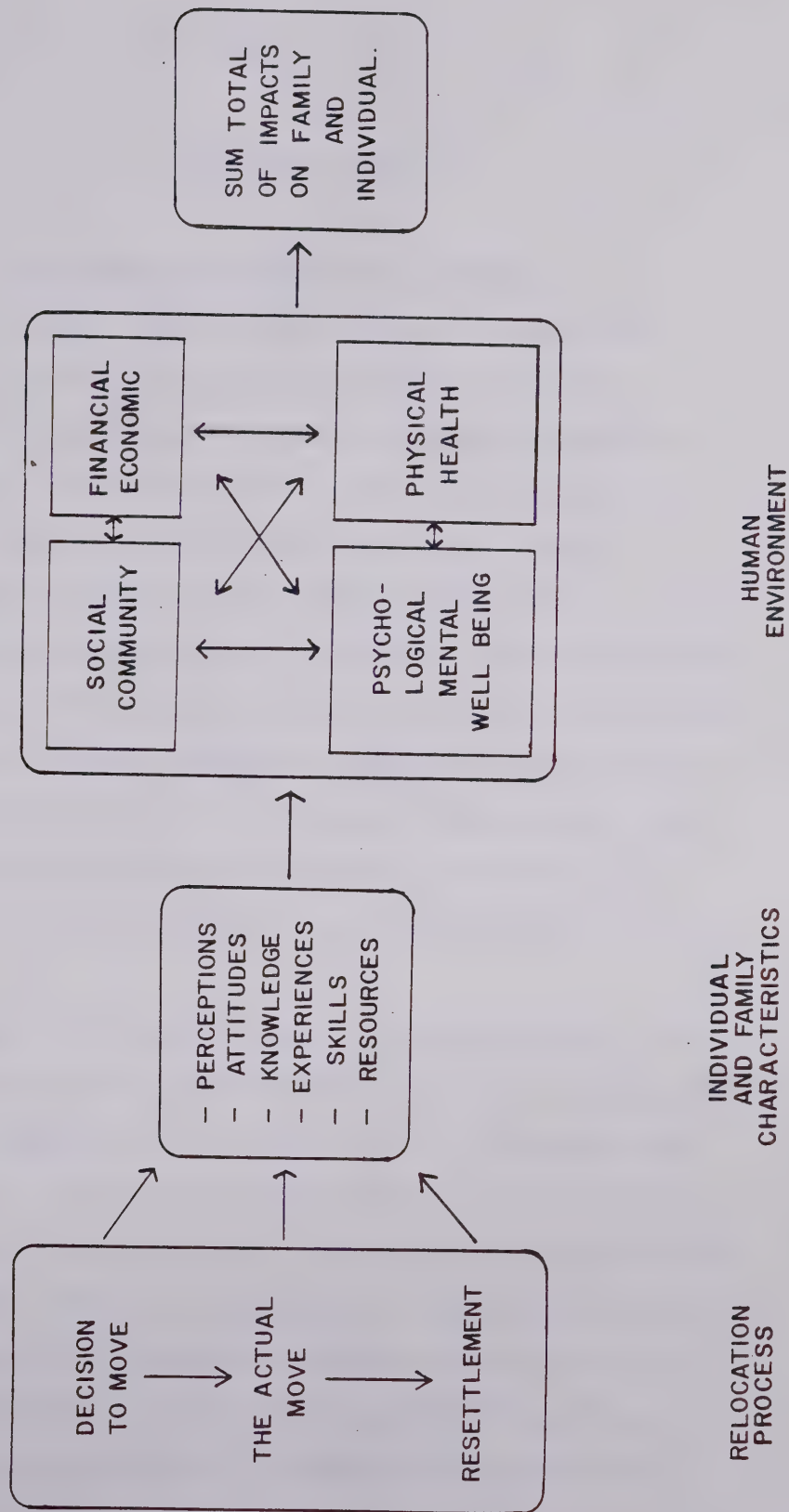
expected to possess a greater motivation towards adapting, overcoming or coping with changes and problems which developed throughout their relocation. In general, individual capabilities, skills, knowledge, attitudes and resources would act to influence the overall negative or positive impact of the displacement-relocation process.

Depending upon those perceptions and attitudes, and the resources, capabilities and knowledge of those involved, the changes which occurred within each person's life and in his relationship to his community could result in a variety of problems. Areas of each person's life which could be affected by the displacement-relocation process include his economic-financial situation, physical health, psychological-mental well-being and social life. In each of those areas, the changes created by displacement-relocation would need to be adapted to or coped with. Where individuals were unable to do either successfully, problems could result.

Figure 5 graphically displays the conceptualization of that process, and the potential impacts it could have upon the lives of the affected people. In the following sections of this thesis, that conceptualization has been used to provide a framework for data gathering and analysis.

FIGURE 5

DISPLACEMENT RELOCATION : A FRAMEWORK OF PROCESS AND EFFECTS



CHAPTER III

DATA SOURCES AND ANALYSIS

Development of a Framework For the Study

During the initial research and thought on the subject of displacement-relocation, the author contemplated a variety of approaches to a study on that topic. Those examined included an in-depth survey of the families who have been relocated from areas within Alberta because of a coal mine, dam or other resource development, and a comparison between the experiences of two or more communities, and an extensive review of findings from previous studies. Because the goal of the thesis was to provide information on a design and approach for relocation that would maximize the possibility of successful relocation rather than finding out what occurred in one particular displacement-relocation experience, the author chose to undertake an extensive review of previous displacement and relocation literature.

After some initial investigations into the subject area, the author (although initially presuming little information existed on the displacement-relocation process) found a wealth of information and previous studies. The task during the selection of literature to review became one of choosing those that appeared unique and discreet, rather than those which covered the same area. Because of the large amount of information available, the extensive review of previous displacement and relocation literature consumed the bulk of the effort and time spent on this research. In undertaking this study, the

conceptual framework developed in Chapter II for the displacement-relocation process served as a base for the collection and analysis of data.

In order to tie the experiences elsewhere to the Alberta situation, and to obtain a preliminary understanding of what the experiences in Alberta were and whether or not they were similar to those in other areas, the author decided to undertake a few initial interviews with families in the Keephills-Highvale area of Alberta.¹ Of the twenty-seven families affected by a proposed coal-fired thermal power plant in that area, five were interviewed in depth.

In summary, then, this thesis was developed with one major source and one minor source of information. The major source has been a review of displacement and relocation literature; the minor source has been the material obtained through interviews with families from the Keephills-Highvale area, which, although preliminary in nature, permits comparison of an Alberta experience with those having occurred elsewhere.

Review of Literature on Displacement-Relocation

The review of previous literature on displacement and relocation required the completion of five separate tasks: location of information sources, an initial review of the available literature, selection of topic areas, detailed review of comparison of the various pieces of information, and the combination of information on similar topic areas for inclusion in the write-up.

In all, over 70 articles and books were selected from the 500 plus references which were obtained. In the final process of selection, the

choice became one of selecting only those articles which appeared to indicate a new focus, new information or a unique approach. Literature selected was written as early as 1937 and as recently as 1981.

Displacement-relocation, resulting from urban renewal, rural development, resource development, highway construction, public works project development, and government relocation programs, was addressed in the articles. Effects upon the elderly, women, children, families and communities were also discussed in specific articles.

While few of the articles directly addressed displacement-relocation from coal-fired power plants, the main topic of this thesis, the author's decision was that articles which discussed components or similar processes would be useful in illuminating the likely process, effects and approaches of that specific type of displacement-relocation. Whether families lived in rural or urban communities, it was felt that the same general processes would apply, and the same areas of individual and community life would be affected.

After the selection of the desired literature, efforts were undertaken to locate them. In some instances, the literature could be neither located nor acquired. Those publications obtained were reviewed initially to develop a list of topic areas for use in the analysis and presentation of the findings from the review. The final list of topic areas is reflected in the headings and subheadings used in Chapter IV.

Using the framework outlined in Chapter II, the literature was then reviewed in a detailed manner. Information from the articles was pulled out and referenced under the appropriate topic area. Once the review was completed, the information under each of the topic areas was

compared, contrasted and finally combined in the form of Chapter IV.

Case Study Information from the Keephills Area

The second source of information for the latter part of the thesis resulted from interviews with five families who were directly affected by the Calgary Power Keephills power plant and coal mine. The intent of the interviews with those families was to provide some information additional to that obtained in the literature review, as well as to provide some validation for the applicability of the information from that review to the Alberta situation.

In designing the research approach for this thesis, the information gathered from the Keephills-Highvale interviews was meant to provide an indication of experiences in Alberta. Because the major focus of the thesis was on a review of findings from previous studies, information gathered in the Keephills interviews was deemed to be supportive to that obtained from the review of literature. The primary reason for its inclusion was to enable the author to discern if the experiences in Alberta were unique, or if they were similar to those experienced elsewhere.

Selection of interview sample

In selecting an appropriate sample of families from the Keephills area, the author initially obtained a list of affected families from Calgary Power (see Appendix 2). That list was checked with two long-term residents of the area for verification. Initial information was also gathered for each of the families, including their ages, present location, previous farming operation, and degree of impact from

the project (amount of land lost in relation to their farm size).

In the selection of families to interview from that list, the author attempted to choose a sample which would provide variation in age, family life cycle, and type of farm operation. Some families had resettled in areas distant enough to require lengthy travel by an interviewer. The selection of interviewees, therefore, included the criteria of distance. The author was restricted in the time available to undertake the interviews, and so chose not to interview families who had relocated to British Columbia or Northern Alberta.

Of the twenty-seven families or individuals who had sold or lost land to Calgary Power, six families were selected for interviews. Of those six contacted, five accepted and one refused to be interviewed.

Interviewing procedure

In choosing the interviewing procedure to be used for this thesis, the author considered a variety of options including telephone survey, self-administered questionnaire, author-administered interview schedule, and structured personal interview. The type of information desired in this study was that typical of a case study. The author wished to gather detailed information for two main purposes: first, to identify those aspects of relocation and project-related impacts which families identified most strongly; and, second, to compare the effects felt by those families with the data gathered from the review of relocation studies. Consequently, in order to develop case studies for the Keephills-Highvale families, a structured, personal interview format was used. Sellitz et al have defined the case study approach as being "... the intensive study of selected instances of the phenomena

in which one is interested" (1959:60). The method of study, they indicate, could be one of a variety including unstructured interviewing or participant observation.

The method chosen for this study was that of unstructured interviewing. Parker (1979) provided additional details on the actual interviewing technique and approach. In his investigation into the history of the Athabasca Oil Sands region, Parker used a case study approach to obtain an oral history from elders in various communities in that region. He developed a set of guidelines for the interviews which represented the topic areas on which he wished to gather information. Included were topics such as family data, employment experiences, social life and customs, and present and future events.

In the interviewing itself, Parker specifically directed the interviewers to encourage a dialogue type of interview where individuals were encouraged to reflect upon earlier times, things that went wrong or right. He noted that the voluntary cooperation of the interviewees and the preparation and tact of the interviewers were basic to a good interview.

The method of gathering information from the Keephills-Highvale families used in this study was based upon the approaches of Sellitz et al and Parker. After the selection of the sample, the author contacted each of the six chosen families to seek their permission to be interviewed. In the conversation with the families, the author explained who he was, what he was investigating, what his affiliated organizations were (University of Alberta and Alberta Department of the Environment), and what he was calling for. During the discussion, he

indicated the reason for the study (to fulfill a requirement for graduate work, and also to provide recommendations to developers and government on displacement-relocation), assured them of the confidentiality of the information and requested their assistance. Once the permission of the families was received, an appropriate time was arranged for the interview. The author indicated that he wished to have both spouses (or adult members of the family) present, if possible. In most cases both spouses were present, and in two cases adult children were also included.

At the time of the interview, the author reintroduced himself and explained the procedure to be used. Initially, the author had intended to use a tape recorder during the interviews. Reactions from those being interviewed were adverse to the idea, however. Unlike Parker's work, where those being interviewed were in a relatively non-threatened position, the Keephills-Highvale families were in a position where the unintended use of information provided by them to the author could have created deleterious effects. For that reason, the author chose to abandon plans to use a tape recorder, and, instead, took notes during the discussions. Although there could have been a loss of detail in this method of recording interviews, the author believed that taking notes would create a more comfortable interview atmosphere and result in more candid responses to questions and comments.

With each interview, the author used the outline to direct the discussion. Notes were kept of the comments, and the author attempted to follow up on points made by interviewees, in order to fully explore each issue. The five interviews took between two and five hours each. At the end of the interview, the author thanked the family, and

indicated what follow-up would occur.

Assembly of information

Once interviewing was completed, the information was divided into two segments: background on the family, and details of the effects, perceptions and attitudes of each family. The background data was used to provide a description of the family for inclusion in Chapter V. Details on impacts, perceptions and attitudes gleaned from each of the interviews were compared, contrasted, and combined for presentation in the final section of the same chapter. The presentation of the information in the final section was designed so as to maintain the anonymity of the respondents and protect the confidentiality of the information.

Problems of Bias, Validity and Reliability

In any study, a variety of potential sources of error exist which, if left unchecked, could create problems for the validity and reliability of the findings and conclusions of the research. Methods employed in gathering information could be unreliable or biased. Analysis of the data could be inappropriate and result in misleading conclusions. Findings and data could be misinterpreted so that conclusions were incorrect. In the discussion of problems of bias, validity and unreliability for this study, five areas will be discussed: the author's personal biases, the selection and review of literature, the choice of five interviews from the Keephills area, the interview schedule and resulting data and, finally, the limitations of the data.

The author's personal biases

The author was born and raised in a rural Alberta community, has a background in community organization and has worked extensively with rural Alberta families in assisting them to present their perspective on resource developments to developers and government regulatory bodies. His personal perception, flowing from past experiences, has been that the displacement-relocation process, as it exists in Alberta, is flawed. Seldom do those persons who are displaced and relocated escape being disadvantaged by the process. That bias greatly predisposed the author to examine the topic of displacement-relocation in his graduate work. It was, to some degree, for that reason that the author chose to emphasize in his study the examination of past displacement-relocation experiences. To place greatest priority on that, rather than on a study of an Alberta experience, where the author had been involved, lessened the role Alberta experiences would play in this analysis of displacement-relocation phenomenon. By proceeding in that manner, the author believed that the amount of personal bias in the study, which could emanate from his personal knowledge of the experience being investigated, would be thereby reduced.

In addition, part of the author's previous training involved developing the ability to identify and address personal biases in his work. Through an acknowledgment of the existence of those biases, the author attempted to minimize their effect throughout the research exercise by continually requiring himself to be alert to, and to minimize, their influence on the components of the study and the interpretation of data.

The literature review and selection process

Difficulties could arise if the literature selected for review were not representative of the literature available on the topic area. To counteract any bias of that nature, the author spent a significant amount of time in searching for potential literature, using library searches, computer searches, reviews of back issues of relevant periodicals and newsletters, and published bibliographies on the subject. That selection process attempted to ensure that key articles in the topic area were included, as were articles providing a variety of perspectives on the subject. Articles were purposefully selected to include displacement- relocation experiences resulting from a variety of forces, from resource developments to public programs.

One additional factor potentially creating problems of reliability of the data was an over-emphasis in the literature on the negative aspects of displacement-relocation. The author, by attempting to examine both negative and positive experiences, tried to overcome that possible bias. In the thesis, then, information was drawn both on the effects of the displacement-relocation process, and on the components of the process which appeared to enhance the success of the resettlement.

The selection of five Keephills' families as a sample

With the relatively small number of families (27) affected by the Calgary Power project in the Keephills-Highvale area, a census approach to interviewing affected families would have been much more reliable than taking a sample. Because of time limitations, however, it was not possible to interview all families; therefore, the validity and

representativeness of the data for all of the affected families is questionable.

The author's intent in undertaking the interviews, however, was to learn how people affected by the Calgary Power projects perceived those projects, and what effects they had experienced. To assist in the selection of the sample, the author obtained preliminary information on each of the families, and attempted to stratify the sample according to age of the family, degree of effect, occupation (farming and non-farming), and post-relocation residence (inside or outside of the Keephills area). Of those families who were interviewed, one was retired, one was young and just starting out, one was a non-resident landowner, four were part-time farmers, one was moving into full-time farming, two had grown up in the area, two had been long-time residents, three had left the immediate Keephills-Highvale community, and one had remained after relocation. In sum, the five families who were interviewed were generally typical of the communities in the area. Only one specific family type was missed - a full-time, farming family who had moved and continued to full-time farm (3 of the 27 families were in that situation).

The interview schedule and the data

The interview schedule used in the Keephills interviews was developed after an initial review of the studies on displacement and relocation. That schedule may be found in Appendix 3. In undertaking that initial review, the author drew from the literature those factors which appeared to influence the formation of individuals' perceptions and created or modified effects upon the people. In addition, those

aspects of human life which appeared to be affected by the displacement-relocation experience were also drawn from the literature. The interview schedule was a series of topic areas for discussion. Specific questions were not developed. Rather, the interviewer questioned those being interviewed in a natural and conversational way, steering the discussion through each of the topic areas. While the discussion was going on, the author kept notes of comments. Because of the recording method employed (note-taking versus tape-recording), some specific comments were likely missed by the interviewer. However, the choice to not use a tape recorder was made because the presence of a tape machine caused increased anxiety with the interviewees and created the possibility that less candid answers would be given. The interviewer, through the discussions, was able to keep detailed notes and was able to accurately transcribe the general direction and tenor of the discussion and overall views of the interviewees.

Limitations of the data

The two major sources of data employed in this thesis have different limitations. Their limitations will, therefore, be discussed separately.

The information gathered from a review of displacement-relocation studies should, in general, be applicable to any displacement-relocation experience. Pinpointing potential problem and problem areas and providing general principles which should guide displacement-relocation programs is a major objective of this thesis. For that purpose, the data is satisfactory and applicable.

Applying specific conclusions about cause-and-effect relationships to the Alberta experiences could be suspect, however. Those studies reviewed resulted from situations governed by different legislation, histories, attitudes, perceptions and resources. So, for example, any specific conclusions which were drawn from a Kentucky experience about the infringement of legal rights of those being relocated, would not necessarily apply to a similar situation in Alberta; legal rights may be different in each jurisdiction.

When the results of all of the studies are combined, however, some general findings do occur across the board, regardless of legislation, history, attitudes and time. Those findings and conclusions should be applicable to Alberta.

The Keephills-Highvale interviews are specific to that area. Of those that were affected by the land acquisition program of Calgary Power, only one category of family was missed as indicated earlier. Because of the small sample (5 of 27), however, it would be difficult to argue that specific findings would be applicable to all families. The author does, however, believe that many of the experiences related by those who were interviewed have been felt by many others in similar circumstances. His experience, and knowledge gleaned from working with five other rural communities in similar circumstances, would support the findings from the Keephills-Highvale community.

Because the information for this thesis was gathered from only Keephills-Highvale community, specific findings from this displacement-relocation experience could not confidently be applied to those elsewhere. Again, different actors would be involved, and there would be a different history, and different perceptions and attitudes

on the part of both the developer and the community. The general findings, however, should provide direction for the design and operation of any displacement-relocation program developed in Alberta in the future.

FOOTNOTES

1. Although Keephills and Highvale are, in fact, two somewhat separate rural communities, because the Calgary Power project affects both, and for ease of reading, the two have been referred to as one (Keephills-Highvale) within this thesis.

CHAPTER IV

FINDINGS FROM SELECTED STUDIES ON DISPLACEMENT & RELOCATION

Introduction

Across North America and Europe, communities, families and individuals have been displaced and relocated as a result of a variety of developments. Among those creating the greatest number of relocations have been highways and freeways, dams, coal and resource recovery operations, urban renewal projects, public works and government programs (for example, parks developments). This chapter provides a review of the findings from a number of studies into the effects of displacement and relocation from developments of those types.

The review of studies has been guided by the framework developed in chapter 2 and has focused upon three major areas:

- 1) the characteristics of individuals and families which have been found to be relevant in determining level and type of impact, and achievement of post migration adjustment,
- 2) characteristics of the displacement-relocation process itself which have been found to influence adjustment, and
- 3) the impacts which have been found to occur as a result of displacement-relocation.

Individual and Family Characteristics

As indicated in the generalized framework for displacement-relocation, a variety of individual and family characteristics were

believed to affect impacts and post relocation adjustment. Two major areas are discussed below: 1) perceptions and attitudes, and 2) personal characteristics, skills, resources and knowledge.

Perceptions and attitudes towards displacement-relocation

Throughout the literature on displacement-relocation, a variety of factors appear to have influenced the attitude of relocated individuals towards the development and the relocation. Attitudes towards developments and relocations have been found to play a large role in the successful adaption of persons being relocated. Individuals who felt positively about a development were found to be more willing to accept changes, and were subsequently better able to cope with the changes which occurred as a result of the development and relocation (Burdge 1973; Burdge and Ludtke 1973).

A number of factors appear to have influenced the initial perceptions and subsequent attitudes of individuals towards their displacement- relocation. The following discussion examines nine factors: knowledge of the project, perceived legitimacy of the development, approach and practices of the developer, degree of effect, vested interests, age, place identification and individual values, and social and economic characteristics.

Knowledge of the project. Burdge and his colleagues have studied what effect the level of personal knowledge of a project has upon an individual's attitude towards the development. They found that the knowledge of a project did not necessarily result in a positive attitude towards it, especially for those persons who were required

to move. However, when people were not informed about the project, and about public hearings on it, they reacted negatively and subsequently formed vocal protest and interest groups (Ludtke and Burdge 1970; Burdge 1973; Burdge and Johnson 1973; Burdge and Ludtke 1973). Whether the attitude of the affected individuals was positive or negative depended, Burdge and his fellow researchers found, upon some of the following factors.

Perceived legitimacy of a development. Napier and Wright (Moody) (1971, 1974, 1975, 1977) discovered, in their studies, that the affected individuals were highly critical and questioned the use of eminent domain laws for the acquisition of lands for water resource developments, recreation developments and transportation testing centers. In Germany, where 5,200 individuals have already been relocated, and a projected 19,000 more will be required to relocate from coal mining in the future, major relocations have occurred with little dissension. An important factor appears to have been, however, that an awareness existed amongst those being relocated that no alternatives to the mining of the coal existed. Concerns were raised, though, with compensation levels and noise and air pollution standards (Der Spiegel, 1977).

Approach and practices of the developer. Affected individuals have been found to have formed negative attitudes towards the developers because of the manner in which land was assembled for various projects. When the land assembly process was operated like a real estate transaction, people's perceptions were that they had been dealt with

unfairly, and that the compensation that was paid was inadequate to cover the costs of relocating (Abramson 1965; Napier 1971; Burdge and Johnson 1973; Napier and Wright 1974, 1975; and Napier and Moody 1977).

Relocated individuals and families subsequently developed feelings of injustice and dissension as a result of the non-payment of losses they sustained in relocating, over and above those they were compensated for (Adkins and Eichman 1961). Negative attitudes which developed as a result of land assembly practices were subsequently directed more generally towards the development and the developer (Napier, 1971; Napier & Wright, 1974, 1975; Napier & Moody, 1977).

Negative attitudes towards development also occurred when the development was staged. People appeared to desire stability after a period of change. Where change was incremental, with the second stage occurring shortly after the first, hostility developed within the affected community. After the initial development, community commitment to, and acceptance of, change decreased (Napier and Wright (Moody) 1974, 1975, 1977).

Vested interests. Ludtke and Burdge (1970), Burdge (1973), Burdge and Johnson (1973), and Burdge and Ludtke (1973) found that those individuals who had their vested interests enhanced by a development were more favourably predisposed to the development. Individuals who made money in the sale of their land, who profited from business successes resulting from the development, or who had a higher and greater possibility for greater life satisfaction at the new location, all had their vested interests served. Conversely, the opposite was



also true: those who lost or had their interests diminished or disadvantaged as a result of the project, developed negative attitudes towards the projects.

Degree of effect. The presence and degree of a negative attitude towards a development has been found to positively relate to the degree of effect; the more the effect, the greater the reaction. If the effect was largely negative, the attitude and reaction of the affected persons was likely to also be largely negative (Burdge and Ludtke, 1973).

Age. Age and its effect upon attitude formation have been examined by a variety of authors (Goldstein & Zimmer 1960; Ludtke & Burdge 1970; Burdge 1973; Burdge and Johnson 1973; Gill and Murri 1975; Moen et al 1979 and Roper 1980). Conclusions have been contradictory.

The majority have found that increasing age is directly related to an attitude of resistance to change; older individuals tended to resist and have negative attitudes about development and relocation because of their inability to react and act quickly, and their desire for stability. The converse has also been argued, however. Moen et al (1979) argued that older families and individuals have lived through many changes, have built up an inherent capability to adjust to and cope with change, and have a longer view of change. They therefore have greater capabilities to accept change than we usually give them credit for, and view change as inevitable and positive.

Place identification and individual values. Burdge (1973), and Burdge and Ludtke (1973), have concluded that a positive attitude to

development and relocation is correlated with low place identification (indicating commitment to locale and wish to continue residence there), and with values of modernism. Apprehension over moving and a negative attitude towards relocation has been found to be directly related to satisfaction with neighbourhood, home and friends, and with unwillingness to separate from them (Ludtke and Burdge 1970; Burdge 1973; Burdge and Johnson 1973; Burdge and Ludtke 1973; Kennedy 1979). Values of fatalism, familism and traditionalism have also correlated with negative attitudes towards development and relocation (Burdge 1973; Burdge and Ludtke 1973).

Personal characteristics. Persons with high organizational activity, high education levels and high social status have been found to possess positive attitudes towards development. (Burdge 1973; Burdge and Ludtke 1973).

Economic characteristics. Burdge (1973), and Burdge and Ludtke (1973) have indicated that a positive attitude towards development is characteristic of individuals with higher economic standings, and with higher occupational and income levels. Those authors have also found that farmers as a group have often had a negative attitude towards development, generally.

Personal characteristics, skills resources and knowledge

In assessing the ability of individuals and families to adapt successfully to the displacement-relocation experience, several authors have commented upon the role and effect of a number of specific

characteristics of individuals and families. The following presents the findings from those studies relating to the economic, physical, psychological and social characteristics which have been found to be significant.

Economic characteristics. Two main economic-financial characteristics were found in the literature to influence the ability of families to adapt to and cope with their displacement-relocation experience. Those families who were the best off financially and had the highest socio-economic standing usually weathered the experience without great difficulty. Poor families, or those who were least well off, however, were hurt the most by their move; they were typically left in worsened economic situations (Burdge 1973; Burdge & Johnson 1973; Shields 1977).

Secondly, occupation was found to play a major role in adjustment. Having had a diversity of occupations was found to be positively correlated with successful adjustment. Typically, those families whose heads had only had one occupation previously experienced the greatest difficulty in adjusting to the relocation. Despite that finding, however, when families were able to earn greater income after relocation than the level before relocation, satisfaction with life and post-relocation adjustment was increased (Abramson 1968).

Physical health characteristics. While no specific studies were reviewed on the general role of physical health in the displacement-relocation process, a number of studies did deal with the specific impact of age on ability to successfully adjust to the experience. In

general the concensus was that elderly persons, particularly those who were in ill health and/or were hospitalized, had great difficulty in adapting to a move. High levels of mortality were found with those individuals, particularly when prerelocation counselling and preparation were not provided (Budge and Johnson 1973; Pastalan 1974; Merskey 1981). Findings specific to farmers indicated that those in their middle ages or older often found the displacement-relocation particularly traumatic, and had difficulty with adjustment (Abramson 1968).

Psychological characteristics. In the literature, those personal psychological characteristics which were found to strongly influence adjustment were those which indicated a worldliness or a broad range of skills, knowledge and experience. Individuals with a history of previous mobility (particularly if they were successful at their various locations and jobs), higher educational levels, and those whose self perception reflected the high esteem others held for them appeared to be most able to adapt to their displacement-relocation experience (Abramson 1968; Ludtke and Burdge 1970; Burdge and Johnson 1973).

Fried, in his research, found that the level of prerelocation preparedness, meaning the ability of an individual to recognize and take advantage of an opportunity in furthering his goals and aspirations, was a significant factor in achieving successful adjustment. He found that it was even more important than post relocation situations and experiences (1963, 1968).

Social characteristics. Two social characteristics were indicated in

the literature as influencing the ability of individuals and families to adapt to and cope with displacement-relocation: socio-economic status and family structure. As indicated earlier, those persons with a higher socio-economic standing were found to be more apprehensive of moving, but most able to cope with relocation (Ludtke and Burdge, 1970). In addition Abramson found that the family played a very important role in post-relocation adjustment. Those families who had the most stable structure, had the greatest cohesion and offered the greatest amount of support to its members were the best able to adapt to relocation (1968).

In general, of all of the studies reviewed, Abramson in her studies of rural to urban migration provided the most comprehensive discussion of individual and family characteristics and their role in the adjustment process. She found, though, that she was unable to satisfactorily predict post relocation adjustment by examining prelocation characteristics (1968:124). However, she found that approximately one third of the families she studied were unable to satisfactorily adjust to the relocation without external assistance. They lacked the personal capability, with only their own characteristic resources, skills and knowledge, to successfully adjust.

Characteristics of the displacement-relocation process

A number of researchers have examined the approaches and practices which have been used in various displacement-relocation experiences. Studies have focused both on those which assisted families in adapting to their relocation and those which provided little or no assistance. The level of assistance provided by the staff who were employed in the

process, the degree to which local citizens were involved in directing the displacement-relocation program, and the timing of relocation are discussed below.

The provision of assistance. The need for assistance to ensure that the relocation of families and individuals occurs successfully has been argued by many investigators (Satterfield 1937; Kroll 1957; Goldstein and Zimmer 1960; Millspaugh 1961; Fried 1964; Abramson 1965, 1968; Dunsmore 1966; Joyce et al 1966; Mattox 1966; Feidelson 1967; Ludtke and Burdge 1970; Burdge 1973; Burdge and Johnson 1973; Donnermeyer et al 1974; Gill and Murri 1974; Sheehan 1975, 1981; Hartman 1979; Belyea 1981). That need for assistance stems from two factors. Firstly, individuals and families each have differing abilities to protect their interests, to obtain a fair settlement, and to cope and adapt to the relocation experience. Consequently, without a provision or mechanism to ensure the equity and fairness of the relocation experience towards each of those who are relocated, inequities are likely to occur.

Secondly, from a practical perspective, there are a large number of individuals and families who do not possess the capability to adapt to the new social and environmental setting without assistance and support. The presence of inappropriately and inadequately adapted individuals in communities creates the potential for long-term negative effects and problems for those communities, as well as for the families and individuals involved. As indicated earlier, Abramson, in her study of rural migrants found that without special services to aid families to cope and adapt, about one third were unable to achieve acceptable levels of adjustment (1968:123).

While displacement and relocation programs which offer assistance to families have not been used to any large extent with energy developments in Alberta, programs have been used extensively and found to be successful with other types of developments in this province and elsewhere. In the United States, relocation programs have had a long and extensive history. Some of the earliest approaches were developed by the Tennessee Valley Authority in the 1930's for the relocation of farm families in the development of water reservoirs. With the urban renewal programs which were initiated in the 1950s, additional programs and approaches were developed in many of the urban areas in the United States. In Canada, some of the first relocation programs were developed in the Western provinces with the Prairie Farm Rehabilitation Administration (P.F.R.A.) beginning in the 1930s. Additional programs were developed in Newfoundland (Gros Morne National Park), in New Brunswick (the development of a military facility), in Saskatchewan (Agricultural Rehabilitation and Development Agreement community pasture programs) and in Alberta (ARDA-CD 14 relocation program).

The Tennessee Valley Authority (T.V.A.) in the 1930s, in undertaking the relocation of farm families, used the services of agricultural extension agencies to aid in the resettlement of displaced persons. Services provided by the T.V.A. and through their coordination with the extension groups included locating farms for sale (for resettlement), appraising the value of farms in the reservoir areas, and advising families as to the best type of farm to match their skills and resources. Through social case workers, the T.V.A. also assisted families with special problems including those with physical or medical health problems. Each family, prior to relocation, received

an in-depth interview to assess their financial resources, size, condition of the house, relocation desires and to gather any other pertinent data. That data assisted in identifying potential strengths and weaknesses for the relocation process. After relocation, the extension agencies followed up with agricultural education programs to assist farmers to reestablish or develop good farming practices in their new location (Satterfield, 1937).

During the early years of the P.F.R.A. in Alberta, some of the same techniques (the assistance with moving, providing farmers relocated to new areas with advice from farmers operating in that area, and arranging extension services) were used (Cameron et al 1952, 1957; Kirk 1969). The use of qualified relocation specialists has been typical of urban renewal relocation programs, particularly in Boston, New York, Newark and Detroit (Kroll 1957; Goldstein and Zimmer 1960; Millspaugh 1961; Fried 1964; Dunsmore 1966; Joyce et al 1966; Matlox 1966; Parish 1966; Putter 1966; Feidelson 1967; Hartman 1979). Those specialists have included: social case workers, financial/legal advisors, homefinders, occupation counsellors and relocation professionals, generally.

In Alberta, one of the most recent relocation programs occurred within the Agricultural Rehabilitation Development Act Census Division 14 program. That program was directed towards raising incomes in the farm industry, and easing the burden of rural poverty existing in that region. A farm adjustment component of the program was established to assist marginal farm families to achieve a better life situation by either acquiring additional lands to form more viable operations, or selling their land and reestablishing themselves in a new location, in

better circumstances. Staff included a land use technician, an appraiser, and a number of paraprofessionals who were hired from the local area and trained for their jobs. A key role in the program was played by the Farm Adjustment Committee, composed of farmers, who were informal leaders within their communities, and provincial government staff. That committee directed and approved all of the various actions which were undertaken as part of the program.

With the C.D. 14 program, relocation and land buying were used as a means of aiding families in uneconomic operations to achieve a better life - counselling was a key to the success of the entire program. To assist families to reestablish themselves, two additional program components were developed, a home visitors program and a resource training program. The home visitors program involved a home economist, a social worker, a public health nurse and local paraprofessionals. The program was directed toward providing time and money management, nutrition, health information and support for relocated homemakers.

The resource training program employed individuals until they were able to locate a permanent job. Those individuals in the program were paid by the government, and worked on community and government projects. On-the-job training was also provided to increase job and personal skills and, therein, employment marketability (Sheehan 1975, 1980; Belyea 1980).

Community involvement in relocation. While the relocation experience can be viewed as involving only the agency requiring the relocation, and the family or individual being relocated, a number of authors have suggested the need and wisdom for also involving both the originating

and receiving communities. As indicated earlier, the ARDA C.D. 14 program was heavily dependent upon the Farm Adjustment Committee who provided direction on the land to be purchased, and the assistance to be provided to families. That committee heavily contributed to the success of the CD14 program (Sheehan 1975, 1980; Belyea 1980).

In Germany, the Braunkohlensusschuss (Brown Coal Committee) composed of twenty-seven members representing the Federal Government, individual states, various committees, labour groups and the coal mining industry, determines the areas in which coal may be mined and decides on, and plans for, the relocation of the displaced population. The ability of the committee to adequately plan and to assure that the rights of the landowners, as well as the larger society, were protected had greatly contributed to its effectiveness and the low level of public disension (Der Spiegel 1977; Wali 1978; Nephew 1979).

Timing of displacement-relocation. Studies of the relocation of farm families have indicated that problems often arise because of inadequate allotments of time to complete the moving process (Abramson, 1964). Increased financial losses have occurred because of the need to leave goods behind, or to sell farm assets at an inappropriate time, when market prices were low. Those losses were not usually included in the compensation. Abramson (1965) has indicated that farm families being relocated require a minimum notice of one year. Joyce et al (1966) in their study of urban relocation found that, most appropriately, work with families to be relocated should begin a minimum of 12 to 18 months prior to the relocation, and (depending upon the family's capability) continue for 6 to 24 months afterwards. In Germany, because of the

planning process involved in coal mining, a 10-year lead time for planning is not unusual (Wali 1978).

Impacts from Displacement-Relocation Experiences

The conceptual framework for this thesis outlined four major areas where impacts could be created by the displacement-relocation experience: economic standing, physical health, psychological-mental well-being, and social life. Information from the review of previous research is presented according to those four areas.

Impacts to economic and material standing

One of the most important issues highlighted in the studies on displacement and relocation processes was the financial compensation received from the relocating authority. Depending upon that level of compensation, the families being relocated were able to adequately pay the costs incurred in re-establishing themselves in a new location or found themselves with increased debt, and with increased costs of living. This section of the chapter examines changes in the economic situation during the decision, move and resettlement phases of the displacement-relocation.

Financial compensation for the costs of displacement-relocation

Throughout the literature on past relocation of rural people, a major theme exists of inadequate or inappropriate compensation for land, moving and reestablishment costs. Dyck (1960), Abramson (1965), Burdge (1973), Burdge and Johnson (1973), and Napier and Moody (1977) have indicated that relocation costs paid to families did not reflect

the real costs involved in relocation. Relocation agencies systematically offered less than appraised value, and less than fair market value (Burdge, 1973; Burdge and Johnson, 1973). Consequently, the amount of money paid to the families did not allow for the purchase of similar or better farms (Abramson, 1965).

On the other hand, Scott and Summers (1974) indicated that when families moved (but were not displaced), preknowledge of a development (e.g. an industrial plant site) worked in favour of the landowners, resulting in increases over and above agricultural land prices. Where the sale of the land was not forced, landowners, especially if they knew where the demand was coming from, and understood the ability of the interested party to pay higher than agricultural land prices, have requested and received higher prices than would occur if the land were being sold for farming purposes.

From the literature, then, it would appear that families who are displaced typically underwrite the costs of the development by shouldering those costs involved in their displacement-relocation which were not covered by compensation. Smith and Hogg (1971) support that conclusion. They indicated that most often families bear increased and abnormal costs while receiving less than adequate compensation. In essence, they subsidize the costs of the project. Ewasko (190), one of the individuals affected by the Keepphills Power Plant, argued that companies are also in an unfair bargaining position with respect to land acquisition because they have the ability to use expropriation if required. Landowners, if they fail to reach an agreement with a company, can be forced to sell and relocate.

Given that situation, it may appear that the individuals has

little influence over the determination of compensation. Several studies, however, have found that those individuals who are familiar with the legal system, those who have connections within the legal system, or within government agencies, or those who have used the legal system to protect their interests previously, have systematically ended up with higher compensation awards (Abramson 1965; Hartman 1965; Goebel 1970; Burdge 1973; Burdge & Johnson 1973; Napier & Moddy 1977). Those individuals who accepted initial offers, or who did not challenge the level of compensation (almost uniformly older, longer term residents), were paid less for their land (Burdge & Johnson 1973). Hartman (1965) found that those who were most likely to benefit from the relocation were those who previously possessed adequate financial and personal resources. Those who were not financially well-off, and could least afford an economic setback, were usually the ones who found themselves being hurt financially by the relocation.

Economic effects associated with moving. Cost associated with moving involved the actual logistical costs of moving a household and other property from one location to another and the losses incurred by leaving something of value behind, whether that be an asset, a job or some other entity. Compensation for relocation has traditionally included the market value for the land. Moving costs have also been seen as being legitimate costs in calculating compensation. The actual costs of moving, however, have often been higher than those compensated for (Williams 1969; Llewellyn 1974). Donnermeyer, Korshing and Burdge (1974), for example, found that costs not covered as part of normal moving costs included the added costs of renovating a new home to suit

individual tastes (as the former residence had been). Those types of costs, they indicated, could only be uncovered through a personal relationship between the relocatee and the relocating agency, where the agency learned details of a family's life. That situation did not occur when land agents were the only source of contact for the families.

Moving costs have often proved to be higher than had been anticipated; there wasn't enough money to reestablish the farm unit, the cost of travelling to look for a new farm reduced capital, there were increased costs at the new location, often extra feed was required for stock, farmers were unable to obtain credit, and when credit was available, they were unable to meet the payments. Farmers experienced a loss of cattle, machinery, time and a lowered standard of living through displacement (Dyck, 1960; Abramson, 1965).

In her analysis of rural to urban adjustment, and in her evaluation of the Agricultural and Rural Development Act community pasture land purchase program, Abramson (1965, 1968) discovered that relocation produced difficulties in disposing of farm assets, buildings, machinery, judging replacement farms (in winter) and leaving stock to look for replacement land. Suitable replacement land was difficult to find and inadequate payments resulted in farmers often moving to smaller or less productive lands. Family income typically decreased as a consequence.

Burdge and Johnson (1973) found in their study of rural displacements from water resource projects that relocation did not generally occur outside of the immediate area. Persons working off the farm were not required to change employment; however, distance to work

and expenses did change. The move proved to be more of a problem for those individuals who lacked transportation, who were less well off, or who were older and were limited in finding a new job if the relocation resulted in them terminating their previous position. Joyce et al (1966) found that the loss of employment and supportive assistance provided by neighbours created particularly severe economic hardships for the elderly.

Economic effects associated with resettlement. Economic effects associated with resettlement have included higher costs and a lowered income or a loss of income at a new location. In many instances, the cost of living at the new location was greater than it had been at the former residence (Abramson 1965; Burdge 1973; Burdge and Johnson 1973). Obtaining and maintaining housing in a new location has been found to be typically more expensive after relocation. While most relocated families and individuals have been able to upgrade the quality of housing, it has resulted in increased debt. Those who relocated to poorer quality housing were typically lower income families, or elders (Abramson 1965; Hartman 1965; Burdge and Johnson 1973; Larson 1980).

Abramson (1965, 1968) found that the change from a rural to an urban setting resulted in a change in patterns of consumption, and other non-material considerations. She indicated that in rural areas, status is related to moral virtues including hard work and honesty; consumption of material goods are of low relative importance. In urban areas, status is primarily gained through income and material wealth. Consumption is therefore central to status determination. Rural people moving into urban areas, she found, changed their concepts of

consumption (resulting in increased costs of living). In addition, she argued that urban areas operated on a money economy more so than did rural areas and, therefore, income in kind would not play as large a role in urban environments, as in rural, creating additional costs (for example, paying for recreation). The absence of a garden at the new location also increased the cost of living at a new location over that which existed previously where gardening did occur (Donnermeyer et al 1974).

Income losses at the new location were not uncommon. Dyke (1960) found that relocation resulted in losses because non-farm sources of income and immovable assets had to be left behind. Many farmers also moved to smaller farms. Farm incomes were consequently decreased. Mack (1974) discovered that relocation resulted in a reduction of income from investments. Because of delays in obtaining compensation and reinvesting the capital into new property, income was lost. Litigation costs involved in obtaining a fair settlement were not compensated for and also reduced capital. In addition, Breese (1965) found that if displaced families did not have sufficient capital readily available from the compensation process, the families were placed in an economically disadvantaged position. Losses due to inflation (resulting in differences between the price of land at the time the sale was affected and when replacement land was obtained) created additional problems for displaced families in reestablishing themselves after relocation - they either had to accept poorer land or incur debt in acquiring the land necessary to provide an adequate income.

Abramson (1968) found that a relocation from a farm to an urban

area often required mothers to take work outside of the home in order to meet the increased cost of living for the family. In doing so, they required vocational training, guidance and job placement assistance.

Larson (1980), and Clemente & Summers (1973), in examining the plight of elderly people in energy developments, found that the effect of the developments themselves created a rapid increase in cost of living which outpaced income for many elders. Increased competition resulting from an inflow of population attracted by the developments, created higher costs for housing, food, health care and other necessities. Elders were often the hardest hit of all groups because, in addition to having difficulty with the increase in cost of living, they were unable to compete against the younger people for employment, and against the larger retail chain stores, if they owned businesses. Some were reduced to making choices among basic necessities such as food, clothing, utilities, home heating, health care and housing - not enough money was available for the satisfaction of all of those requirements. Those findings, Clemente and Summers indicated, are of particular importance to rural communities, given the high proportion of elders in those areas. Gnanadt (1976), in a study of relocation in downtown Lethbridge, supported those findings above; although some individuals derived benefits from the relocation, many persons, especially elderly and low income families and individuals, endured hardships.

In general, past relocation has, in the main, left families and individuals in a worsened economic situation. While many have found themselves better off in a material sense (owning more, or better, material goods), indebtedness has increased substantially. Those being

affected most negatively were larger families, elders, landowners (as opposed to tenants) and persons who had lived in their area the longest, usually having had the least amount of debt.

Impacts to physical health

Abramson (1965, 1968) found that the effect of relocation upon physical health depended upon where the new residence was located, and what the new occupation of the relocatee was. Relocation to a new farm, she found, usually required greater work outputs; outputs which were acceptable for younger families, but could strain the health of older families. Relocation to an urban setting, on the other hand, required less physical labour, but rural families had difficulty adjusting to the lack of outdoor life, fresh air and water, and to the presence of noise, confusion and danger inherent in city life.

Burdge (1973) found that a relationship exists between emotional disorder, generally deteriorated health and migration. He indicated that relocation of rural families severely disrupted retirement plans, and, in some cases, elderly people had died unexpectedly after relocation had occurred. The particular significance of relocation to elderly people has been investigated by other researchers as well. Postalán (1974), in his investigation of the effect of relocation upon hospitalized elderly, found that relocation resulted in high incidences of death and serious illness for elderly patients. Elderly people were found to have experienced a high death rate (between 25-33%) within six months of moving; frequently, those who had died were those who had expressed resentment or anxiety at moving (Merskey 1981). Developing a preparation program for the people being relocated, however, had a

dramatic effect in reducing the incidence of mortality by one half (Pastalan 1974).

Rural areas often have inadequate health care, limited by the number of doctors and medical facilities. Relocation from rural to urban areas has resulted in special persons requiring medical services to be closer to them, thereby resulting in a benefit to physical health. That accessibility to medical and other services is of particular importance to elders handicapped by a lack of mobility. (Larson 1980).

Impacts to psychological-mental well-being.

The effects of displacement-relocation upon individual and family psychological-mental well-being documented in the literature have been large in number and variety. Those findings are discussed according to the following, breakdown: (a) the role of emotional and psychological commitment in the determination of the degree of effect; (b) grief stemming from the loss of a home, friends and community; (c) stress resulting from the formation of, and need to, resolve new problems; (d) uncertainty, insecurity, persecution, ambivalence and despondency resulting from the psychological, social and physical uprooting of relocatees; (e) the impact of moving on self esteem; (f) anger and hostility resulting from the perceived illegitimacy of various aspects of relocation; (g) alienation resulting from the relocation, and (h) relief, satisfaction and happiness stemming from successfully coping with, and adapting to, the new arrangements.

Identification with place. In the literature, identification with place has been closely associated with the degree of psychological impact relocation creates; the greater the commitment, the greater the effect and vice versa. Cottrell (1951) indicated that in any community, the ideal that is taught, and the norm that is established, calls for individuals and families to bank together, form friendship and social bonds, organize schools, develop physical infrastructure, open stores, build and invest in housing, become involved in community affairs and, in general, undertake a commitment to the community. Within that community there are varying degrees of commitment and, therefore, of identification. He argued that it was those individuals who were most committed, who most closely identified with the community, who were the greatest losers if radical changes occurred in the community. Those people who made little commitment to the community, were in the best situation to pick up and leave with little effect.

Ludtke and Burdge (1970) and Burdge and Johnson (1973) found, in their studies of water resource projects, that the higher the level of identification a person had to a place, the more apprehensive he or she was over moving, the less inclined they were to move and the more difficult separation from the old community and residence was. The intensity of feeling towards a place also varied with the length of residence, and whether or not the property was bought or inherited. The longer the relationship between the individual and the land, the greater was the intensity of sentiment (Gill & Murri 1974). In addition, the less willing an individual was to separate from friends, the more apprehensive they were to relocate (Ludtke and Burdge 1970).

Rural people have been found to be, in the main, very attached to

their homes and communities, and they have a life which is based upon personal, individualistic and familistic relationships. Relocation for those individuals has often resulted in a loss of locus of identification, the psychological results of which have been serious (Burdge and Johnson 1973).

Grief: A number of researchers have, in their investigations, found reactions of grief and psychic loss resulting from displacement-relocation (Fried 1963; Abramson 1965; Burdge 1973; Burdge & Johnson 1973; Llewelyn 1974; and Mack 1974). Some have indicated that simply finding out that displacement was going to occur resulted in mourning for the loss of home and life style (Burdge 1973; Burdge and Johnson 1973). In some instances, psychic suffering became a long-term event when construction was delayed (sometimes for as long as ten years) after the announcement of the development. Burdge and Johnson found that those who suffered grief the most were elderly, long-term landowners who saw little benefit to the project, and had a high identification with their residence and community. Younger, non-landowners who saw benefits in the project and did not have a strong commitment to the community suffered less from stress and grief, and made a more favourable adjustment to their new locations (1973).

Fried, in his studies of a relocation program in Boston, found that there was a wide variation in the individual reactions to the relocation; however the majority experienced grief "...manifest in the feelings of painful tone, frequent symptoms of psychological or social or somatic distress, the active work required in adapting to the altered situation, the sense of helplessness, the occasional expressions of both direct and displaced anger, and tendencies to

idealize the lost place." (1963:151). He found that it was important to understand the psychological implications of both the social and physical aspects of residential experience. Relocation, he indicated, resulted in a fragmentation of routines, relationships and expectations; it also altered the physical environment, and the human actions which occurred in that environment. It provided a disruption in the sense of community which was "an ordinarily taken for granted framework for functioning in a universe which has temporal, social and spatial dimensions." (1963:151).

For those groups whose social interaction was heavily oriented towards the neighbourhood, where friendships, a sense of belonging, and identity were tied to the locale, relocation disrupted those things which grounded the individual and gave him a sense of belonging. It undermined the established interpersonal relationships and group ties and destroyed the sense of group identity of many people. Other factors such as personality, pre-relocational experiences, and post-relocation experiences, though, also influenced the degree of effects. Some individuals were personally more adaptable and could cope with changes. In addition, how people felt about their neighbourhood before the relocation, predetermined, to a large extent, their feelings toward the new community.

Community identity, Fried found, was composed of spatial identity and group identity; the degree of sense of loss and resulting grief depended upon the extent to which either or both were affected. Where both were affected, grief reactions were strongest. Grief reactions were also strongest amongst elderly and long-term residents (1963).

Stress. Malzberg and Lee (1968), in their examination of the effects of relocation on migrants, found that there were considerably higher frequencies of functional and non-functional psychosis among even healthy migrants of all ages. They also found a direct relationship between emotional disorder, generally deteriorating health and migration. Other researchers have indicated that forced relocation, being more stress-provoking than voluntary relocations, resulted in even greater mental uprooting. In addition, they found that a physical move was not necessarily needed to produce stress - much of the stress producing psychological adjustment occurred prior to the actual move (Abramson 1965, 1968; Ludtke and Burdge 1970; Smith 1970; Burdge 1973; and Burdge & Johnson 1973).

Burdge (1973), in his review of resource development literature, found that younger, non-farm persons, or tenants who saw some of the benefit in the development or who had a vested interest in the development proceeding, and persons with low levels of place identification suffered the least amount of premigration stress. Those individuals also adjusted more easily and favourably to a new residence.

When pre-migration stress and anxiety were present, people who anticipated a forced relocation often did not satisfactorily maintain or expand their properties and operations. In some instances, where lengthy time delays occurred between the announcement and the construction of a project (sometimes in the range of ten years), landowners were placed in a particularly stressful situation. They were unsure as to whether or not to improve homes and farms throughout the entire delay (Ludtke and Burdge 1970; Napier and Moody 1977).

Psychological stress was also associated with the actual move, and with the adjustment required in the resettlement process (Abramson 1965, 1968; Ludtke and Burdge 1970). Booth and Camp (1974) found that a move to a higher status community created stress within the entire family, resulting from added frustration and social isolation. Men, they found, because of their work, were often able to overcome the isolation. Women generally took longer, but eventually also adapted.

The particular difficulties and stresses created among women by a move to a new community has been illustrated by Moen et al (1979), Moen (1980), and in a recent National Film Board film on resource towns entitled No Life for a Woman (1980). Moen et al (1979) found that women have traditional roles within the family and community involving stabilization and social integration. When other members of the family underwent stressful situations, the mother was immediately and directly affected. If the impact of the stress upon her directly and through her family was too great, it overwhelmed her, resulting in her inability to carry out her normal role and functions. In the end, family disintegration resulted until the wife recovered and regained her place, role and function within the family. Abramson (1968) found that maladjustment by any member of the family affected the other members.

Roper (1980) examined the differential stress of relocation upon families and individuals in various stages of their life cycle. He found that the impact of relocation was greatest in older, poorer, widowed women; less for older couples whose children were grown; and least of the three for those couples who had children remaining at home. His study indicated that often, the relocation, in combination

with the other life events, overtaxes the adaptive capacities particularly of older women who are being relocated.

Insecurity, persecution and ambivalence. Abramson (1965, 1968), in her studies of rural to urban migration and forced relocation, reported that those persons who moved experienced a variety of forms of psychological malaise including feelings of inadequacy, insecurity, persecution, increased irritability and an inability to make decisions. Llewellyn (1974) found additional feelings of confusion, despondency and uncertainty in individuals and families who were relocated by highway development.

Moen (1980) argued that feelings of ambivalence about developments might reflect a "crisis of disorientation": a conflict between the contradictory desires to keep pace with the future, and to return to the days before the development (1980:16). She also found that the ambivalence about change might be replaced by a denial of its occurrence. That ambivalence, she indicated, must be acknowledged by the individuals and communities if adaptation was to be successful.

For older people, Burdge and Johnson (1973) found that disruptions in normal routine were more likely to have major repercussions than for younger people. Joyce et al (1966) also found that elders were particularly susceptible to insecurity and loneliness resulting from a relocation experience.

Self esteem. Abramson (1965, 1968) found that her respondents, in the adjustment to their new location, particularly if it was in an urban setting, had difficulties in adjusting to new employment and

occupations. Very often they were disappointed in their anticipation of economic gain and they experienced a loss in their sense of employment or occupational achievement, resulting from the change in work style, routine and reward system. Those relocatees also experienced feelings of loss of status, having moved from a locale where they were part of the social organization and had served on various community boards and authorities, to one where they no longer has those types of roles. In addition, going from a position of being self-employed to that of being a wage earner also resulted in feelings of loss of self esteem.

Anger and hostility. A variety of authors and investigators have found anger and hostility in the reactions of individuals and families to relocation (Kroll 1957; Abramson 1965; Napier 1971; Burdge and Johnson 1973; Napier and Wright 1974, 1975; and Napier and Moody 1977). Angry and hostile reactions resulted from a number of factors: the perceived illegitimacy of the development process; the use (in the U.S.) of eminent domain laws and (in Canada) expropriation powers (Kroll 1957; Napier 1971; Napier and Wright 1974, 1975; Ewasko 1980); the land assembly process (Napier, 1971; Burdge and Johnson 1973; Napier and Wright 1974, 1975; Napier and Moody 1977), and the levels of compensation (Abramson 1965).

Alienation. Napier (1971), Napier and Wright (1974, 1975); Napier and Moody (1977), and Burdge (1973), in examining the response of rural people relocated by water resource projects, found that the level of alienation amongst family members did not increase, rather it appeared to decrease. Families did, however, feel alleviated from the

developer. Lower levels of alienation were especially found with individuals who relocated into or near to the same communities they were relocated from (as would be the case with a rural resident who relocated into the nearest small town) and their neighbours. Those studies did not examine the situation of individuals who relocated outside of the immediate area, so little was known of the levels of alienation those individuals experienced. In urban renewal programs, however, Goldstein and Zimmer (1960), and Williams (1969), did find alienation amongst urban residents who were relocated into new areas.

Impacts to social situation and social life

The findings of the relocation literature on the impacts upon the social life of those being relocated, and upon their communities, has been divided for discussion into six areas: (a) status, roles and functions, (b) social integration, (c) community identification, cohesiveness and commitment, (d) social participation and interaction, (e) social bonds and friendships, and (f) formal and informal social support systems.

Status roles and functions. Abramson (1965, 1968); Moen et al (1979); and Moen (1980); have specifically examined the effects of relocation of families upon the roles and functions fulfilled by each of the family members. As Abramson (1965) indicated, on the farm, women and children are part of the family, but they also play a large role as part of the work team with all members of the family having interrelated functions. Occupational and parental roles are, to a large extent, fused. When a family relocated to a non-farm situation,

many of those previous roles and functions became obsolete. A separation between home and work occurred for the breadwinner, and the effects of that change ramified throughout the family. In addition, often the mothers were required to take on employment out of the home in order to provide sufficient income for the family - a direct contradiction with the traditional role of wife and mother on the farm. Those changes, in total, resulted in changes and problems in parenting. Children had fewer responsibilities than were assigned previously by the family, and were freed for other pursuits.

Moen (1980) found that women who relocated with their husbands and families were not able to regain public roles they formerly held; if they moved from farm to town, they also lost many of the productive functions they previously performed at home. In total, loss in roles and functions often resulted in concomitant losses in social status. Abramson (1965) found that males were subjected to a loss of status when they lost their land, and their roles and functions as a farmer.

Budge and Ludtke (1973) established that relocation has resulted in status loss in a perhaps unique way. In Kentucky, people, especially older people, identified with their garden in much the same way as urbanites identified with their lawns. When relocation resulted in the loss of a garden, the status that was gained from being able to produce a handsome garden was also lost.

In general, however, those families who relocated to a community similar in character and status to their old one stood the greatest chance of recovering their former status and accomplishing the move with the least stress (Ludtke & Burdige 1970; Booth and Camp 1974).

Social Integration. After the move into an urban area, Abramson (1968) found that relocating farm families often developed problems in integrating into the urban environment and lifestyle. They had difficulties in accepting urban consumption patterns; they encountered differences between their value system and the values of others in the new community, and between values of the parents and values their children began to absorb; they also had difficulties in adapting to the working patterns and physical environment in the city.

Moen (1980) in her analysis of women in energy development, argued that the functions of social integration and stabilization have traditionally been "women's work". She indicated that that may offer an explanation of why social problems increase when energy developments occur. Those developments, and the demands and changes they require of the human population, she argued, result in a disruption in the ways women create and maintain social support systems for themselves, their households and their communities.

Community identification, cohesion and commitment. Napier (1971); Napier and Wright (1974, 1975); and Napier and Moody (1977); studied the effects of water resource developments on the fragmentation of communities and the effect upon community cohesion. Their three phase study indicated that rather than creating fragmentation and alienation, the effects of the actions of the development agencies in their land assembly programs resulted in greater levels of community identification and cohesiveness. Those studies, however, only investigated the reactions of the remaining community residents, including those who had relocated within the community; persons and

families who had relocated outside were exempted from study. As a result, they did not indicate what effects were felt by those residents who relocated to outside areas. Other research has found that after sale of their lands to the development agency, some farmers received hostile reactions from their former neighbours resulting from jealousy or resentment of their desertion of the community (Abramson 1965).

In general, as indicated earlier, Cottrell (1951), in an analysis of the effects of rapid change on a small community and its residents, concluded that residents most negatively affected were those who most closely conformed to our concept of an ideal community citizen, those who had developed strong commitments to the community, invested financially in it, those who raised their children there, those who worked to build and maintain the community, invested time and money; in general, those who took on the greatest responsibility for, and commitment to the community. Those who were the opposite, residents who maintained little commitment or who did not identify with the community, were the least affected.

Social participation and interaction. A reduction in the social interaction has been found to occur within families following relocation from their farms. Activities where the family had previously interacted together (picnics, drives and shopping) decreased. Those families where children were still at home also noted changes in them as well; there was less opportunity for joint recreation for parents and children, and about one-quarter of the children experienced problems in lack of social interaction and adjustment with friends (Burdge and Johnson 1973; Abramson 1968).

Goldstein and Zimmer (1960) in their study of relocation of elderly city residents, found that the relocation disrupted even the few social contacts and opportunities for social interaction those persons had. For those elderly with problems of mobility, relocation seriously affected the ability to re-integrate back into social life in their new location. Relocation for them resulted in a significant loss in social participation; few rejoined organizations after the move (Warrence 1963).

Social bonds and friendships. Social bonds and friendships have played a key role in relocation and assimilation; in a large part, their presence and quality have been seen to be determinants of adaptation, assimilation and satisfaction in a community (Moen 1980). Those families who have been able to maintain previous ties, or who have been able to form new ones have been able to assimilate and be satisfied with their new community. Where those ties have been removed and not reformed, problems have developed.

Abramson (1968) documented a trend relocated farm families displayed in choosing a location for resettlement which allowed for the maintenance of previous social ties. Those families did not wish to make a complete break with their old community after relocation, and therefore chose a new neighbourhood, when possible, which would allow for the continuance of their past friendships.

Warrence (1963), in his study of relocated elderly, found that loss of friends occurred with the move. That was particularly important since location near their family (given the lack of visiting which occurred) was not as important as being close to friends, or

acquiring them at the new location. Warrence also discovered that loss of friends for the elderly was important for other than social reasons; that loss also resulted in a loss of access to the household aid in housekeeping and cooking, which those friends provided.

Within urban areas, Booth and Camp (1974) found that relocating to a higher status neighbourhood than before resulted in a greater alteration in friendship patterns than relocating to a similar status neighbourhood. The friends of families who relocated to a similar status community changed less than with those who relocated to a higher status area.

Napier (1971), Napier and Wright (1974, 1975), and Napier and Moody (1977), found that water resource developments and consequent relocation did not significantly affect the interrelationships of individuals who remained in communities near the developments. Other authors, however, have documented significant effects upon social bonds and friendships with similar situations, including: a loss of neighbourliness in areas affected by highways (Llewellyn 1974), an increase in conflicts amongst neighbours which developed after the sale of lands (Abramson 1965), a separation from friends and neighbours and a change in church (Adkins and Eichman 1961), changes in visiting patterns, and greater isolation after relocation than before (Burdge & Johnson 1973).

Social support mechanisms: formal and informal. Social support systems within communities assist families and individuals in coping with problems which arise throughout daily life by helping to satisfy needs of the individuals. Those community mechanisms can be of a formal

nature, such as government social and health services, or they can be informal, such as friends helping friends build a garage, or look after children.

Cortese stated, "The underlying and long range consequence of an energy development boom is that it seems to create serious disruptions in the informal support mechanisms which allow a community to take care of itself. Disruption, change or destruction of these invisible social structures is considerably more important for the long run viability of the community than the initial increases in social pathology rates which they create." (1979:9).

Moen (1980) supported that perspective on social support mechanisms. Energy developments and their effects, she indicated, created a breakdown in those support systems; not the personal friendships and informal group associations, but the community-wide protection and care that neighbours gave to one another in public and private life. That protection and care included helping in an emergency, watching children on the street, and dealing with public rowdiness, drunkenness, and petty crime through private mechanisms rather than public, institutional mechanisms. That mechanism, however, was only possible, she stated, amongst people who knew each other.

For elders, the formal as well as the informal social support systems are important. Neibanck (1965) recommended, from his study of the relocation of older people, that factors which needed to be considered in their relocation included ease of accessibility to services and amenities (such as stores, churches, clubs, health care, social services), proximity to persons of similar ages, interests and life situations, and closeness to concentrations of activity. Because

of the relative lack of mobility of elders, support services, of necessity, have to be close or easily accessible to their residences. Elderly persons often require formal support services more than an average person; developments, though, place extreme demands upon just those services which elders require, reducing their access to even those services which are easily accessible (Larson 1980).

Political realities of displacement-relocation. Shields (1977), in a review of literature on displacement and relocation, found that those individuals and families who were most likely to be relocated were poor, had poor life chances, were lower status, and lacked political power and influence. He observed that it was those types of persons who were least likely to be able to organize and mobilize effectively against the relocation. Indeed, he indicated that development agencies have attempted, as part of their site planning, to locate projects in areas where public opposition was likely to be negligible or improbable.

In his studies of highway planning, Llewellyn (1974) argued that highway route selection has all too often followed the path of least political resistance - precisely those areas inhabited by low income, long-term elderly or minority groups. That finding was supported more generally by Hartman (1979) in a review of historical and present forced relocation practices in the U.S.

Moen (1980) found that a large degree of fatalism existed in communities affected by energy developments. Much of the acceptance of those developments, she concluded, appeared to be the result of a fatalistic attitude rather than the result of choice, the fatalism occurring because of the recognition by the community of the power and

influence of the energy companies, a government determined to increase domestic energy production, and other sectors which expected to profit from the development. Moen stated that, in addition, rural residents tended to be fatalistic, even without the development, because of their lack of power and influence in the larger society. Energy development added to that attitude because of its effects which tended to bring about a restructuring of the local social, economic and political hierarchies, and resulted in a real and a perceived decrease in personal control over individuals' lives.

Napier and Moody (Wright) (1971, 1974, 1975, 1977) in their research, although initially believing that water developments would create community fragmentation and non-resistance, found instead that the developments they studied created a high degree of community cohesion and resistance to the development. In part, the differences with the developments studied could account for the differences in results. With Napier's research, the communities lost people, but did not, it appeared, receive many additional persons. In a similar situation elsewhere, where public hearings and information on a project were not well publicized, a lack of awareness resulted and public hearings were not well attended. Subsequently, however, organized and vocal opposition was formed by residents of that area (Burdge & Johnson, 1973).

By comparison, Moen et al (1979) looked specifically at energy developments which resulted in large numbers of additional people moving into and inundating the existing community. That study found that a high degree of community fragmentation and a lack of resistance occurred. Together, those authors above appear to indicate, through

their findings, that thresholds of change exist; in one case the impact was large enough to heighten community cohesion and identity and create resistance, while in the other, the change was so large and pervasive that it washed away or drowned any organized resistance.

Summary of salient findings on displacement-relocation

The conceptual framework developed for this thesis indicated the characteristics of an individual and his family, the family's relationship to their environment and the displacement-relocation process which they experienced would interact to create and influence the types of impacts which were felt by the family and its members. Information was presented in this chapter on those three major topics.

Findings from the review of literature has indicated that the perceptions and attitudes a family holds towards a development and their displacement-relocation heavily influences the way in which they approach dealing with the day-to-day and long-term issues they confront in their relocation and resettlement. In general, the research indicates that those individuals and families who have a good understanding of the project, perceive the project to be legitimate, believe the approach and practices of the developer to be fair and reasonable, believe that they would gain as a result of their move, are not negatively affected, have little identification and commitment to their home and community, have a higher socio-economic standing and are able to protect their interests are those who would likely have the most positive attitude towards their displacement-relocation and would be the best able to adapt and cope with the experience. Those families in the opposite situation would likely have the most negative attitude

and encounter the greatest difficulty in approaching the experience constructively.

In the examination of the personal characteristics, skills, resources and knowledge, the research concluded that those families who were in the best life situation generally (economic, social, physical health and psychological mental well-being), were also those most likely to be able to best adapt, cope and achieve the greatest level of post-relocation adjustment. The review of literature also found, however, that a large number of families had been unable to successfully adjust to their displacement-relocation experience without assistance.

Those factors within the displacement-relocation process itself which were found to be of particular importance in the design of a process which would maximize the adaptive and coping abilities and the post relocation adjustment of families were the provision of appropriate levels of assistance in the decision to move, the move and in reestablishing the family at the new location. Specific areas of assistance included legal, financial, occupational employment, home making, health and nutrition, emotional and psychological, life skills, agricultural extension, land appraisal and general relocation services. The provision of adequate timing to complete the displacement-relocation was a second important factor, and the third was the inclusion of a significant degree of community involvement in the planning and execution of the displacement-relocation process. All of those factors, however, presume that an adequate level of compensation, sufficient to cover the complete and true costs of relocation, has been provided as part of the process.

In examining the areas of impact which have been found to result

from the displacement-relocation process, four areas were elaborated upon: economic, physical health, psychological-mental well being and social. Economic and financial costs associated with displacement-relocation were typically only partially covered by the monetary compensation families received from developers. Significant costs were borne by the displaced families because of simplistic approach used in calculating compensation, and because little followup was provided to uncover and reimburse families for real costs which were incurred. As a result, families who were displaced often underwrote the costs of the projects which displaced them.

While some impacts to physical health were discovered, most of the effects were felt by elderly people, in large part because of a weakened physical health condition, and because of their requirement to be close to medical facilities. Escaping from, or moving to a location which inherently had a greater or lesser health risk because of environment (crime, pollution) or work (retiring from farming) also provided an impact upon longer term physical health.

A large number of psychological-mental well being impacts were raised in the literature. The level of commitment to community appeared to strongly influence many of the impacts, however; where the commitment was greatest, impacts were also the greatest. Impacts which were highlighted included grief, stress, insecurity, persecution, ambivalence, self esteem diminishment, anger and hostility and alienation. The relationship between level of commitment and social impacts were very similar; those individuals and families who had the greatest ties to their previous community were impacted the most. Effects which were found included changes to status, roles and

functions, decreased social integration, both increased and decreased community identification, cohesion and commitment (depending upon the degree population movement); reduced social participation and interaction; the destruction of social bonds and friendships and the deterioration of both formal and informal social support.

In general, the studies which were reviewed found that those individuals and families who were the greatest and most negatively affected were also those least able to protect themselves and to cope with the displacement-relocation. From this review it is clear that many impacts, which could be avoided or mitigated through the actions of developers, have been left to be borne by the families who have been displaced. Those impacts are real and significant and have been found to ramify throughout the lives of many of those families for years. Confronting and adequately addressing those impacts has been found to be essential to successful displacement-relocation.

CHAPTER V

DISPLACEMENT-RELOCATION FROM THE KEEPHILLS-HIGHVALE AREA OF ALBERTA

This chapter presents information on the displacement relocation process which has occurred with the Calgary Power Keephills Power Development, approximately sixty kilometers west of the provincial capital of Edmonton. Between 1977 and 1979 land was acquired by the company from twenty-seven land owners, five of whom were interviewed as part of this study. In order to orient the reader to the Keephills project, an introduction has been provided outlining background and details on the project, roles of the various actors who were involved in the process, and a description of the Keephills-Highvale community.

Introduction and Background

The Keephills Power Plant

The Keephills Power Plant is a coal fired thermal electric power generating plant composed of plant facilities which include two power generators each produce 375 MW of electricity and are referred to as Units 1 and 2), a coal storage area, a raw water storage pond, water make up and blow down pipelines, and a cooling water discharge canal. Related ancillary facilities include a cooling pond for used water, a lagoon for the disposal of ash remaining after the burning of the coal, an associated coalmine and haul roads, electric transmission lines, various additional roads, and a railway spurline. The Keephills project shares one coal mine, the Highvale Coal Mine, with the Sundance

Power Plant located approximately 8 km. Northwest of the Keephills Plant (CP Ltd. 1979).

Background to the Keephills Power Project

In Alberta, the production distribution and sale of electrical power is carried out through a cooperative arrangement between the various power companies and power consumers. There are three major power producers in the Province, each of whom own power generating facilities: Calgary Power (as of 1981 re-named TransAlta Utilities), Alberta Power and Edmonton Power. Three types of power distribution arrangements also exist in the Province. In large urban areas, such as Edmonton and Calgary, the municipality purchases power in bulk and then resells the power to individual customers within its corporate boundaries. Some of those same municipalities produce their own power as well (for example Edmonton Power). Rural Electrification Associations were developed as electric power co-operatives to serve rural areas in much the same way as the municipalities served their citizens. Lastly, the power producing companies also have their own distribution systems to supply individual customers in smaller urban areas.

All of the power producers and consumers in the province are linked through the Alberta Interconnected System (AIS). That system handles electrical power almost as a bank handles money. Power is produced and it flows into the system, which distributes the power around the Province, allowing consumers to pull off the amount they require. That cooperative arrangement simplifies the process of getting power which is produced in one area to the location (sometimes

across the province) where it is consumed. The credits and debits of power and associated costs are assigned through a complex bookkeeping system.

When the demand for electrical power in the A.I.S. increases to the point where the existing facilities are unable to supply sufficient power, additional power generating capacity is added to the system. Because of the long lead time necessary to plan, obtain approval, construct and commission a new power plant, planning for new plants has been taking place ten years or more in advance. As part of that planning process, three questions have to be answered: when will additional generating capacity be required, how much capacity will be necessary, and who will provide that capacity.

In Alberta, the Energy Resources Conservation Board (ERCB) develops energy forecasts for the Provincial Government. Approximately every four years, the ERCB has held public hearings into future energy requirements for the Province. The major power producing companies and consumers also have an organization which projects electrical energy demand: the Electric Utilities Planning Council. Future demand (timing and size) is predicted primarily through those two organizations and are updated from time to time as required. Those projections are then translated into numbers and sizes of power generating units required in specific years.

On the basis of those projections, having consideration for the lead time required, power producing companies vie for the right to supply the required electrical power. At any one time, each of the three companies would have designs for projects to meet the anticipated demand.

As soon as was required, one or more of the companies would apply to the Energy Resources Conservation Board for government approval to develop the necessary power generating capacity (coal fired hydro or perhaps some other type). Where more than one company applied for approval to supply power production to satisfy the same demand (for example both Calgary Power and Edmonton Power applied in 1978 to bring on generating units in 1983 and 1984), the ERCB would recommend which one should receive approval (in the above case, Calgary Power was given approval to construct Keephills 1 and 2). The final decision in Alberta rests with the Provincial Cabinet, who take the ERCB recommendation as advice, and pass an Order In Council approving the project and setting out conditions.

The project approval process

When a company wishes to receive Provincial Government approval to build and commission a power plant, they are required to go through an often long and comprehensive approval process. The company would first be required to provide a detailed application to the ERCB. Included within that application would be a project description, technical data on the reason for and design of the power plan, an economic cost benefit analysis and an environmental (biological, physical and social-community) impact assessment. In developing that application, particularly the social-community portion, the company would have to heavily involve the communities which surrounded their proposed development. A program would have to be established to disseminate information about the project, discuss the implications, identify impacts, and design and implement mitigative measures. Because of the

nature of social-community impact assessments (where the affected communities are the study subjects), the research involved in preparing those documents would need to heavily involve the local citizens.

Over and above the informal information dissemination and involvement process above, there are two formal government requirements for involvement. Approximately 60 to 90 days in advance of public hearings, the company is required to attend a Public Disclosure meeting at which time they provide detailed information on their project. That meeting is held in one of the communities to be affected, and local people are encouraged to ask questions and discuss implications in order to develop a clear understanding of what the company is proposing. Approximately 60 to 90 days later, the ERCB presides over formal public hearings where the company presents its proposal. Interested companies, groups and individuals are able to cross examine the company and present information (in the form of interventions) at that hearing, and the company and government representatives are able to cross examine all of the intervenors. At the end of the hearing, the company and all of the intervenors present final arguments, and the ERCB adjourns to consider the evidence which has been presented.

When the ERCB has completed its review, it issues a decision report which outlines its position on the development. At the same time, the Provincial Department of Environment, which would have (as part of the overall application) received applications for permits under the Clean Air, the Clean Water and Water Resources Acts, as well as have had the Environmental Impact Assessment referred to them, may also issue required permits. Both the ERCB and the Alberta Environment recommendations would be provided to the Provincial Cabinet who would

make the final decision.

Once cabinet approval was received on the project in general, any specific approvals required under various pieces of legislation would be applied for (for example, mining licences would be required for each area to be mined, and a development and reclamation plan would need to be approved for the reclamation). Throughout the life of the project, other permits and licences might also be required. After Provincial Government approval, the company would need to obtain a development permit from the county or municipal district in which their development was located. In doing so the company would be required to go through a second public hearing, at the county level, in order to obtain a permit to construct the plant.

Roles of the various actors in the process

In accomplishing the above process a number of specific actors would be involved in a variety roles. Some of the more important actors in the process and their roles are described below.

The Company: As explained above, the company would have the responsibility, once having identified a potential project, to deal with the various government agencies involved, develop the detailed application for approval, involve the local citizens in preparing that application, and appear at preliminary disclosure meeting and public hearings. Once approval was received the company would obtain all necessary materials and labour, when required, for the construction and operation of the project. The acquisition of the necessary land would need to have been accomplished in time for construction of the various

facilities associated with the plant. All necessary fuels would also need to be arranged by the company prior to the commissioning of the plant.

In the specific relationship between Calgary Power and the Keephills-Highvale Community, two groups from the company have been involved: the project planning staff, and the landmen. Each have had separate tasks and responsibilities: the project planning staff have had the tasks of arranging community involvement in the project, alleviating public concerns and developing mitigation measures as part of their overall responsibilities for the design of the project. The landmen have had the responsibility to acquire the necessary land for the project in a timely and cost efficient manner. Those individuals appraised land values, negotiated selling prices and where necessary took the Company's position before the Surface Rights Board (with assistance from lawyers and other company representatives).

The Energy Resources Conservation Board. As outlined above, the ERCB bears the responsibility for determining the timing and recommending on the approval of new electric power generation capability in Alberta. Because of their jurisdiction with coal mining, the Board also approves any coal mining in the Province. The ERCB holds public hearings, provides advice to cabinet on energy resources matters, and recommends conditions for project approvals dealing with energy issues. In addition to its role in project approval, the ERCB also fulfills a monitoring role on energy projects, ensuring satisfactory compliance to various legislation and regulations.

The Department of Environment. The Alberta Department of Environment has major responsibilities in both the approval and the monitoring of electric power plants and mines. Under various pieces of legislation, the Department provides permits and licences for components of developments (air emissions, water intake, water emissions, and reclamation). The Environmental Impact Assessment (EIA) legislation also falls under the jurisdiction of the Department; the Minister requires an EIA when he believes that significant environmental impacts could result from a development. That assessment is prepared according to guidelines provided by the Department, and submitted either as part of a larger application or separately. Within Environment, two groups have responsibilities relating to the EIA process. One group within the Environmental Assessment Division indicates what information is required in an EIA and coordinates a government review (by a number of other Provincial departments) and evaluation of the EIA. They also assist in preparing government questions for the ERCB public hearings and are involved in the writing of the decision report.

The second group, primarily concerned with the public involvement and community impact portions of the EIA process, monitor community-company interaction, provide assistance where required to improve the process, and provide assistance to private citizens and groups in preparing for the public hearings. In a sense that group acts as a watchdog to ensure that the affected communities have an adequate opportunity to make their views and wishes known to the Province, prior to a decision on a development (the author worked in both groups during the Keephill project development process).

The Surface Rights Board. While in many instances land is acquired by developers through private negotiation with land owners (Calgary Power historically has acquired large amounts of land prior to project approval), once Cabinet approval of a project is obtained by a company, if for some reason an agreement cannot be reached between a landowner and a company for the sale or lease of land required by the project, the company can appeal to the Surface Rights Board for intervention. The Surface Rights Board is bound by the provisions of the Surface Rights and Expropriation Acts in formulating any decision. Depending upon whether the land is to be used for mining or for a power plant, the board can authorize either a right of entry or an expropriation. At that time, the Board also makes a decision on financial compensation which the company is required to provide to the landowner. Unlike a court of law, the Surface Rights Board is designed to be largely informal to enable individual landowners to represent themselves before the Board. Hearings held before the Board are also often held on the land under question in order for the members to see the land, and to assist the parties in the presentation of their cases.

The Keephills Power Plant Steering Committee. Under the Provincial Cabinet Order-in-council which approved the development of Keephills 1 and 2, Calgary Power was to satisfy the Chairman of the Land Reclamation Council of the formation of a local steering committee to oversee and monitor the development of the Keephills project. That committee was to have representatives from the local community, the company and the provincial government. Unlike the COKE group (see page 119) the Steering Committee was a legislated requirement of

the company in the development of the project. That committee was formed in 1978 and presently has 13 members; three local residents, two company representative, two county officials, and six non-voting members from various provincial agencies and the County of Parkland. (While encountering initial difficulty in dealing with substantive issues, the committee appears to be functioning much better some three years after its formation).

The Structure of the Keephills - Highvale Community

Sporadic settlement within the Keephills-Highvale area began around 1905, when the first settlers homesteaded in the area. After the completion of the Grand Trunk Pacific Railway in 1910 (approximately 11 km north), however, settlement began to increase substantially. The hamlet of Keephills began with the construction in 1909 of the Keephills school. In 1938 a community hall was also erected, and in 1949 a new school was also built. By the middle of the 1950's two stores and a post-office were opened; however, by the early 1970's all had closed.

Highvale, situated about 7 km northwest of Keephills, began with the construction of a post office in 1909. By 1970, however, that post-office had closed (CP Ltd. 1978). A service station had opened in about the 1950's and continued to operate until approximately 1980. Highvale still contains a church.

As of 1981, most of the residents of the Keephills-Highvale area were using Stoney Plain for most shopping and other services. Major purchases were often made in Edmonton because of the close proximity of Keephills to the city. While the Keephills school continued to

operate, the number of pupils was declining and only the elementary grades were taught. Junior high school was taught in Duffield, approximately 25 km northeast of Keephills, and high school education was regionalized in Stoney Plain.

Keephills and Highvale, typical of many small rural Alberta towns, had decreased in commercial importance with the increased ease of transportation and access to large centres in the 1950's and 1960's. Social life in the area, however, was quite active. One association, the Keephills Athletic Association, owned the Keephills Community Hall and sponsored frequent community dances, barbeques and other events. Wedding dances were also held in the hall. The Keephills Athletic Association provided the only organized group in the community which was broadly based prior to the Keephills project, although a number of community members also belonged to the Rural Electrification Association and church groups. Leadership within the community appeared to follow typical rural Alberta patterns. Those members of the community who were in leadership position were usually older, well established, fairly well-off long-time resident farmers. Within the evolution of Coke, however, younger men did move into positions of authority in response to the project.

At the time of the Keephills development, the rural community surrounding the project was heavily dependent upon agriculture. Most of those living in the area were farmers (either active or retired). Since the late 1960s, however, Calgary Power, with the construction and commissioning of the Sundance Power Plant (south of Lake Wabamun, but North of the Keephills), had been developing into a significant employer of local people (see Table 2). Because of its proximity to

TABLE 2

Total Labour Force Required to Construct and
Operate Sundance Units 1-6, Keephills Units 1-2 and
the Highvale Mine - the "without" Keephills 3 & 4 Scenario

Year	Plant Construction	Plant Operation	Mine	Total
1970		36		36
1971		36	44	80
1972		35	48	83
1973		45	46	91
1974		60	71	131
1975	1,100	76	67	1,243
1976	800	100	121	1,021
1977	600	160	137	897
1978	400	200	143	743
1979	499	205	163	867
1980	635	230	224	1,089
1981	575	239	261	1,075
1982	590	239	303	1,132
1983	410	311	347	1,068
1984	50	342	386	778
1985 (onward)		342	361	703

Note: The 1979 and 1980 figures are revised to reflect the actual labour force in those years and the most recent forecast figures have been used which vary slightly from the September, 1979 estimates.

Source: CP Ltd. 1981:1-6

the City of Edmonton and Lake Wabamun (one of the most heavily used recreational lakes in Alberta), the area was also being affected by recreational and residential acreage demands from the Edmonton area.

Off-farm employment was quite common within the area. In addition to employment with Calgary Power, individuals were employed as plumbers, electricians, teachers and in other positions. In 1976, the population in the area surrounding the Keephills power plant and mine (enumeration areas 351 and 352) stood at 715, with approximately 40% under 20 years, 20% between 19 and 35 years (individuals or families just starting out), 30% between 35 and 65 years (established and mature families) and 8% over 65 (mostly retired). The sex ratio for that area was 1.14, reflecting the rural pattern of outmigration of young females. Table 3 outlines the age-sex distribution for the area (CP Ltd. 1979:5.6). Figure 6 provides a map showing the relevant enumeration areas.

In general, while the two communities of Keephills and Highvale have been closely related and residents of each are involved in activities within the other community, many residents do differentiate between the two. For them they are two separate communities. For the purposes of this thesis, though, they are being written as one.

A History of the Keephills Project and community response

Prior to July, 1976, Calgary Power had identified the need for additional power generation capacity for the early and mid-1980s. As a result, the company had begun work on a proposal to develop a large power plant in the Camrose-Ryley area of Alberta. On July 15, 1976, however, the Alberta Government announced that they were not prepared

Table 3

Population By Five Year-Age Group By Sex

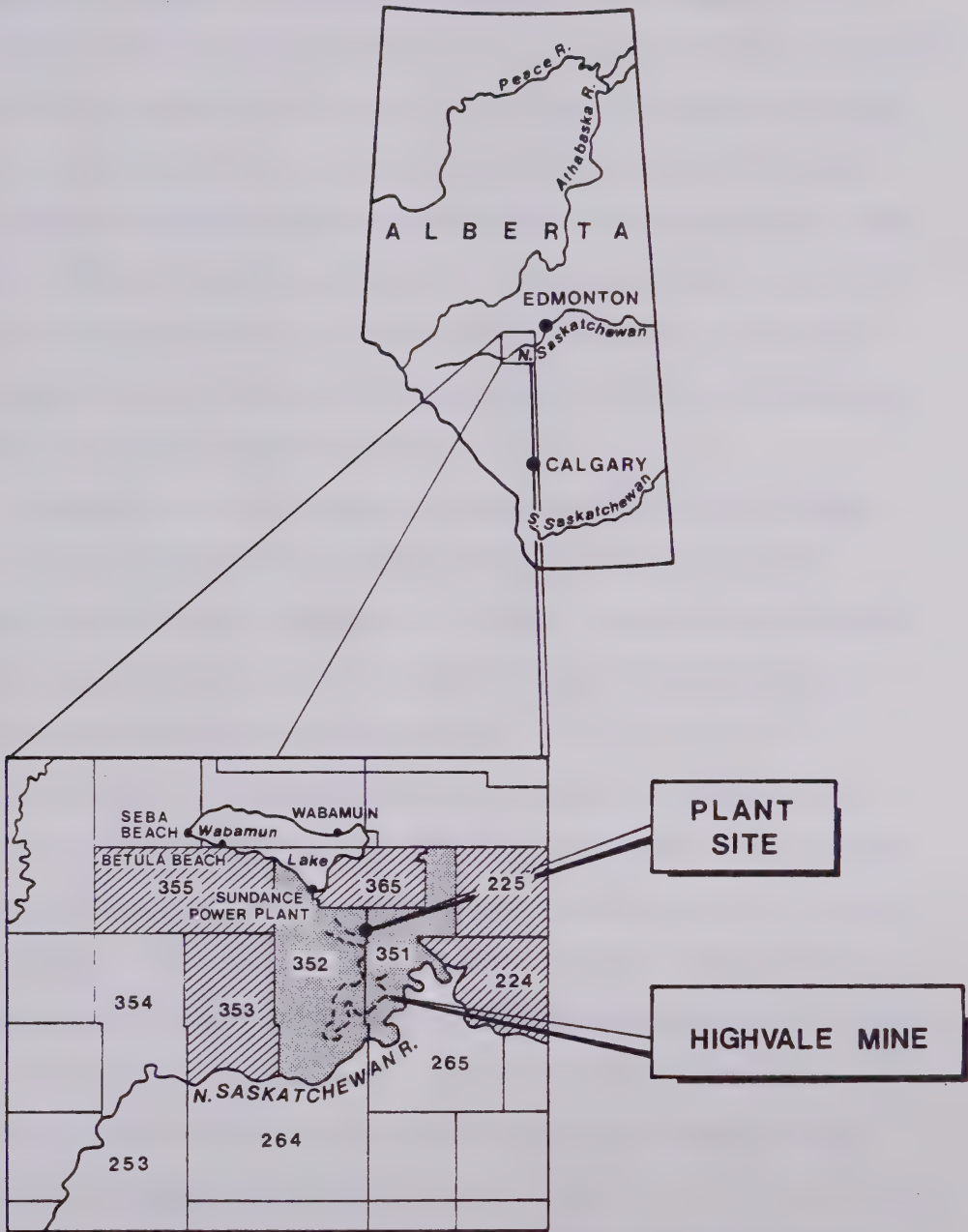
Enumeration Numbers¹

Age Group	224		225		365		351		352		353		355		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0-4	10	15	10	15	45	45	10	15	25	20	-	5	15	10	115	110
5-9	10	15	30	20	55	50	20	15	30	15	10	5	10	15	165	135
10-14	15	20	30	30	50	45	25	15	20	20	10	15	25	20	175	165
15-19	10	10	25	20	45	30	15	10	10	15	15	5	20	15	140	105
20-24	-	5	20	10	20	20	5	10	20	10	10	-	10	5	85	60
25-29	15	10	15	15	20	20	10	15	15	15	5	5	5	5	65	85
30-34	5	10	10	20	10	10	15	5	10	25	5	5	5	15	60	90
35-39	5	5	15	15	10	5	5	5	20	10	5	5	5	5	65	50
40-44	10	5	15	15	5	5	5	10	5	10	10	5	10	10	60	60
45-49	15	10	5	5	-	10	10	5	15	15	5	5	15	5	65	55
50-54	5	5	10	10	5	5	10	15	10	5	10	5	10	10	60	55
55-59	10	5	10	5	5	-	10	10	10	5	10	-	5	-	60	25
60-64	5	5	5	10	-	5	5	10	5	5	10	-	5	5	30	40
65 +	-	5	15	5	10	10	15	15	10	15	10	5	15	15	75	70



Note: In all tables from the Federal census, cell numbers are rounded to the nearest five by the government in order to prevent identification of individuals. This means that cell entries of 3 or more are rounded up to 5 and 2 or 1 are rounded down to 0.

Source: CP Ltd. 1979:5 (from 1976 Census of Canada, Alberta Bureau of Statistics)

FIGURE 6
ENUMERATION DISTRICTS INFLUENCED BY THE KEEPHILLS PROJECT



LEGEND:

-  351, 352, DIRECTLY INFLUENCED.
-  365, 224, 225, 353, 355, ARE PERIPHERAL AREAS INFLUENCED.

Source: CP Ltd. 1980:1.2

to give approval on the Camrose-Ryley project at that time. (That announcement came after a formal application had been submitted to the government, but prior to any public hearings on the project.)

Because of the pressure of time, Calgary Power, already having one existing power development south of Lake Wabamun and one north of the lake, and having previously done studies on the Keephills-Highvale area, quickly switched their focus from the Camrose-Ryley area to the Keephills-Highvale area (see Figure 2). In part, the speed with which the reorientation was made was also influenced by the presence of a competing alternative location - Alberta Power's proposal for a plant at Sheerness in east-central Alberta.

In October of 1976 a projects representative for Calgary Power, who had been involved with the Camrose-Ryley project, initiated contacts with residents of the Keephills area. At that time, personal letters, project summaries and a series of newsletters were sent to residents of the community by the company.

During initial contacts regarding the Keephills project with people in the Keephills-Highvale community, the Calgary Power projects representative encouraged the formation of a committee which could act as a spokesman for the community at large. Calgary Power's initial concept was of a committee which would provide a meeting place for the community, company and government, with full members from the community, company and county and observing advisory members from a variety of government departments.

In the fall of 1976, the Department of the Environment began a drilling program in the Keephills-Highvale area to gather information on the characteristics of the overburden (the soil and strata between

the coal and the land surface) for use in evaluating the company's reclamation plans. As part of that program, the author acted as a liaison for the Department with the community and obtained agreements with landowners for access for the drilling rigs. While providing a necessary service, that task also allowed for a legitimate entry into the community. During that initial period, the author also encouraged the formation of an organization which would provide an organized and unified voice for the community in its dealings with the company and the government.

By the end of November, 1976, the company had filed a formal application to the E.R.C.B., and had notified the community of its plans to involve them in the project through a newsletter and an open house. The community was actively discussing the formation of a community steering committee to represent it in project-related activities. On January 4, 1977, the community, at a meeting of the Keephills Athletic Association, voted to establish the Committee on Keephills Environment (COKE) as a spokesman for the community. The committee, as it was formed, consisted entirely of residents from the area - no outside members from the company or government were included. Later that month, Calgary Power held a formal Preliminary Disclosure Meeting in Keephills to publicly inform area residents of their project.

Up to that point, contact by the Calgary Power projects representative, and the author had been directed towards the Keephills community. The perception at that time was that the Keephills-Highvale community was the one which would be most severely affected by the development. The Committee on Keephills Environment (COKE) became the focal group within the area. That trend of dealing primarily with the

Keephills-Highvale community through COKE was to continue throughout the project approval process. The general belief appeared to be that the Highvale community was part of the Keephills community (and would therefore be represented by COKE) and that the interests of the two communities were the same or parallel.

Prior to March of 1977, residents of the Keephills-Highvale community and the company were engaged in preparing for the public hearings on the project. At those hearings, in mid-March, interventions were submitted by COKE and by a number of other intervenors, including some families from the Highvale area.

Approval for the project was given by the ERCB in August, 1977, subject to a number of conditions, including a revised mine plant which would contain mining to the north of the secondary highway and the requirement for the formation of a steering committee to monitor the development of the project. That committee, having membership from the community, company and government, was formed in November, 1977.

In December, 1977, the Keephills project was given final approval by the Alberta Government. Advisory members were subsequently added to the Keephills Power Project Steering Committee by Provincial Government departments and agencies. After some initial difficulties the first year (infrequent meetings and frustration by the community members that the committee was not dealing with the substantive issues), the committee began to hold regular meetings early in 1978.

Community Issues

Two major issues which arose as a result of the project were the relocation of the hamlet of Keephills and the land acquisition

principles and practices. With their initial mine plan, Calgary Power had proposed to mine south of the secondary highway. That would have seen the coal under the hamlet of Keephills mined in the late 1990s. Subsequent mine plans did revise that timing and the likelihood of mining the areas upon which the hamlet stood. However, the community residents, not knowing that the Alberta Government would order a revised mine plan, initiated discussions with Calgary Power on the relocation of Keephills. Rather than wait until mining was only a year or two away, the Community argued for the relocation to occur as quickly as possible, to assure the continuance of the hamlet. By relocating it, and incorporating features which would entice additional families to settle there, the community believed it could assure the survival of the hamlet. The company agreed to the earlier relocation and a detailed process developed to determine a new site, plan the community layout and facilities and accomplish the layout. That process, lasting from early 1979 to the present, involved a number of meetings, negotiations and details on various aspects of the new community.

The second major issue was that of land acquisition. As the Committee on Keephills Environment (1981) stated in a brief to the Alberta Government Select Committee on Surface Rights:

...we have primarily been involved in a series of unbalanced negotiations. Negotiations between an experienced, powerful industry and inexperienced, relatively powerless individuals. At first, we feared the unknown involved in dealing with the company and the power developments. Now we fear the known, having had over three years of experience with the company in numerous negotiations (2).

The community had seen the land assembly process as being an unfair, unbalanced process in which they typically lost out, in favour of the power company.

In October, 1979, Calgary Power submitted an application to the Provincial Government for an expansion of the Keephills Power Plant (two additional 2-750 megawatt power generation units). As part of that application, consultants retained by the company conducted a sociological survey of residents of the area and reported on the results. In answer to a question "...on whether the company had dealt fairly with people in the area," 45% felt that the company had treated the people fairly, 15% didn't know and 41% believed that the company had been unfair (CP Ltd. 1979:13). Most of the negative responses, however, came from directly affected individuals. Those who responded "don't know" were generally from outside of the area directly affected. The results of the survey appeared to be skewed because interviews included non-affected individuals. Their positive or neutral responses create the appearance that the negative attitude was smaller than what actually existed amongst those individuals who had been directly impacted by the company.

Reasons for believing that directly affected individuals had been dealt with unfairly stemmed primarily from the company's approach to land acquisition. More specifically, responses indicated:

- | | | |
|----|------------------------------------|------|
| 1) | dissatisfaction with price - 45.2% | |
| - | below replacement price | 22.6 |
| - | poor purchase price | 20.8 |
| - | didn't get price wanted | 1.9 |

- 2) dissatisfaction with CP Ltd. actions - 35.9%
- intimidation/misleading 17.0
 - lack of consistency 9.4
 - wouldn't buy when land was offered 3.8
 - use of false pretenses 3.8
 - caused insecurity 1.9
- 3) - dissatisfaction with the position in which the landowner was placed vis-a-vis the land acquisition - 18.9%
- limited to CP Ltd. as purchaser 17.0
 - no bargaining power 1.9

(CP Ltd. 1979:14)

The findings from the survey on community attitudes towards Calgary Power's approach to land acquisition, community participation and community information implied that the Company's approach to land acquisition was a major (but not the only) source of resident dissatisfaction (see Table 4). While more than half of those surveyed indicated satisfaction with the company's information to and

Table 4

Percentage Distribution of Attitudes Toward
Fairness of CPL With Regard to Selected
Community Concerns (N=133)

CPL Dealt Fairly With Community	Selected Community Concerns					
	Land Acquisition	N	Community Participation	N	Community Information	N
Yes	28.6%	38	57.9%	77	57.9%	77
No	44.4	59	19.5	26	22.6	30
Don't know	26.3	35	19.5	26	17.3	23
No response	.8	1	3.0	4	2.3	3
	100.0%	133	100.0%	133	100.0%	133

Source: CP Ltd. 1979:13

involvement with the community, some dissatisfaction was also apparent in that area.

In the past, land acquisition for projects has often begun in advance of project approval; however, any acquisition which involves the use of right of entry or expropriation procedures, occurs after government approval of a project. Land assembly of all of the project components has particularly created a large degree of conflict and animosity in the past. In every project the author has worked on, land issues were of great significance to both the families and the communities affected by developments.

Historically, the attitudes and approaches of power companies have been that they are required, by law, to justify their costs before the Alberta Public Utilities Board (PUB) in order to obtain a rate increase for their power. Any costs which were suspect were open to question, and the PUB had the authority to disallow costs which appeared unwarranted. A disallowance would mean that the company would have to exclude those costs from their figures used in arguing for a rate increase. In essence, then, the company would be required to cover those costs through a reduction in their return on investment. Consequently, Calgary Power, in particular, has argued that they must buy land at the least possible cost.

Those families who have owned the land have seen the situation somewhat differently. To them, the loss of their land was an infringement by the company (acting for the power consumers of the province). By relocating, they saw themselves as moving for the good of the entire Province. If their relocation was actually justified, they believe that they should not be disadvantaged because of the needs

of the rest of the province, or society in general. As such, they thought that any costs they bore as a result of the displacement relocation should be picked up by the power company and passed on to the power consumers. In addition, many believed that they deserved an extra bonus as encouragement for their efforts to move and re-establish of the Alberta society at large. Logically, they argued, if they would have wished to sell for market value, they would have done so long before. Because they desired to continue farming at their existing location, any requirement that they move should have provided an incentive for them to move. The positions of those two major actors involved in power production in Alberta have often resulted in conflict between the two.

The Keephills-Highvale Experience

The following information, gathered from interviews with five families from the Highvale-Keephills area, provides details on the specific experiences of those families with displacement relocation from the Keephills Project. The Material is organized according to five sub-headings: (1) background information on each family; (2) the process of displacement-relocation experienced by the families; (3) their perceptions and attitudes toward the displacement-relocation, the land assembly process, the company and its staff; (4) the effects of displacement-relocation which were felt by those who were interviewed; and (5) the actions taken by various landowners in the displacement-relocation process with the apparent results.

The Keephills-Highvale Interviews

Throughout most of the interviewing, confidentiality of the information provided in the interviews was a major concern of families. Some of the those families were in litigation with the company and were greatly concerned about the possibility of the information they provided getting into the hands of Calgary Power and being used against them. In addition, because of the small number of people interviewed, their identity would be difficult to disguise. Conflicts between neighbours and friends within the community had developed previously. The author wished to reduce the possibility that the specific comments and experiences of individual families (which were relayed in confidence) be credited to the families personally and create problems for them in their community and with the company. For that reason, much thought and effort was spent to disguise and separate comments from individuals. To protect the confidentiality of the information provided by the five families, specific details have been presented in a composite form in the following four sections. The description of the families have been left with few details on their specific experiences which might lead to future difficulties for them.

The Families

Family 1. Family 1 consisted of two parents in their late 40s. Their three children were grown and lived away from home. The father had been, and continues to be, employed at the existing power development. This family had originally owned one-quarter section of land for some twenty-five years prior to the Keephills power development. That land was taken for the power plant.

The family was originally approached by Calgary Power in the winter of 1976-77 for the sale of their land. After the first contact, the family decided to secure a lawyer to act on their behalf. Shortly after the initial contact and the discovery that their land was required by the project, the family began to look for replacement property close to the area in order to minimize the distance to work, friends and community. The family received a notice of intent to expropriate in April of 1978. An initial payment was received and they moved to a new location approximately 20 miles from their old location in the summer of 1978. A compensation hearing was held before the Surface Rights Board in October, 1978, and a decision was handed down in February, 1980. The final award of compensation from the Surface Rights Boards amounted to \$122,400.00, approximately \$55,000.00 greater than the payment received from Calgary Power in 1978.

The family was, at the time of the interview, living in their new home located on an acreage. They had been unable to acquire a replacement farm, and had ended up buying the acreage.

Family 2. Family 2 consisted of a couple in their early 30s with two preschool children. Their land in the Keephills-Highvale area had been part of a family farm operated by three siblings, their families, and their father. Within the farm operation, the family members shared machinery and work. The couple who were interviewed had completed a new house two weeks prior to learning of the proposed development, in the fall of 1976. At that time, the family breadwinner was working as a tradesman in Edmonton, and was in the process of switching into full-time farming. He had been raised and schooled in the Keephills

area.

After finding out about the project, the family hired a lawyer to assist in arguing against the project at the ERCB hearings. They were highly active in the public hearings (one of the few families who were). Both prior to and after the government decision on the development, this family searched for a replacement farm near their existing land but not affected by the project. After the decision, the family members sold their land; the one family interviewed sold in 1979 and moved to a new farm approximately 65 km away.

At the time of the interview, this family were living on the land they had purchased, but were planning to sell it and buy a larger farm closer to the Keephills area. With the new land, they intended to switch into full-time farming.

Family 3. Family 3 consisted of two families who jointly owned a quarter section. The adults were in their 30s and 40s with two children in their teens. Both couples were well educated (one a former university professor) and had purchased the land a few years earlier for a family retreat within close proximity to Edmonton. Their main residence was in Edmonton.

The two couples were first approached in early 1977 by the Calgary Power land agent. After the initial contact, of which the families were highly critical, the company land agent did not return. Only as a result of the family contacting senior company management, did the landman return to continue the negotiations.

Throughout those negotiations, the family looked for replacement property. Prior to the sale of their land, they located new property

and purchased it. Their land in Keephills was one of the last to sell, and sold at one of the highest prices. A condition of the sale set by the company was that they not disclose the full purchase price and conditions to the community. The sale of their land was transacted prior to going before the Surface Rights Board.

Family 4. Family 4 consisted of an older woman and her son in his mid-20s. The mother had moved to the land upon her marriage and resided there for 50 years. The son had been raised in the community, had gone to university in Edmonton and had returned. The son had office experience and was part-time farming some of the family's two quarters; the remainder had been leased to neighbours.

The family was first approached by the company in the fall of 1976 to sell their two quarters. They initially began to look for replacement land, but decided to hire a lawyer to act on their behalf in the negotiations with Calgary Power and to argue against the company's plans. At the heart of their argument was a disagreement with the company over the amount of land required for the project. The policy of the company had been to purchase on a quarter section basis; however, this family argued that the company's needs were less than full quarter sections. If the company were to only take what they needed, this family believed they could continue to reside on their land. The company desired the purchase of the entire farm initially, which would have required the family to relocate.

Throughout the initial negotiation period, the family searched for replacement land. Two years after the initial contact, however, CP Ltd. offered to purchase only one-quarter at a price exceeding the

company's original offer for both. In 1979, a hearing was held before the Surface Rights Board and the company was granted a total of 200 acres, which excluded the farm site and 58 acres. Settlement was near the value offered by the company for the total quarter. In the award, however, almost 45% of the legal costs the family incurred in their defence were disallowed by the Surface Rights Board.

At the time of the interview, the company was negotiating for additional lands on the other quarter for coal haul roads; however, the home site was intact and would remain so. The family was examining the possibility of opening a restaurant and business on the remaining lands, to replace their lost source of income from the lease of their farm land.

Family 5. Family 5 consisted of a couple in their late 40s with seven children, most of whom were still at home. The father was a long term employee and in a senior position at the existing power project. The family owned and lived on a quarter section of land. Both of the parents, and the children, had been raised in the community.

The family was initially approached in 1977 by the company to sell the land. After negotiations, the land was sold in the summer of 1979, with a leaseback arrangement enabling the family to live on the property until it was required by the Keephills project. When the family had originally made an agreement, they had understood that the lease was for eight years; however, they were required to move after only two years had elapsed.

At that time of the interview, the family was looking for new property and was planning to build a new home on a smaller acreage

either in or near the Keephills area, if possible.

Process of Displacement and Relocation

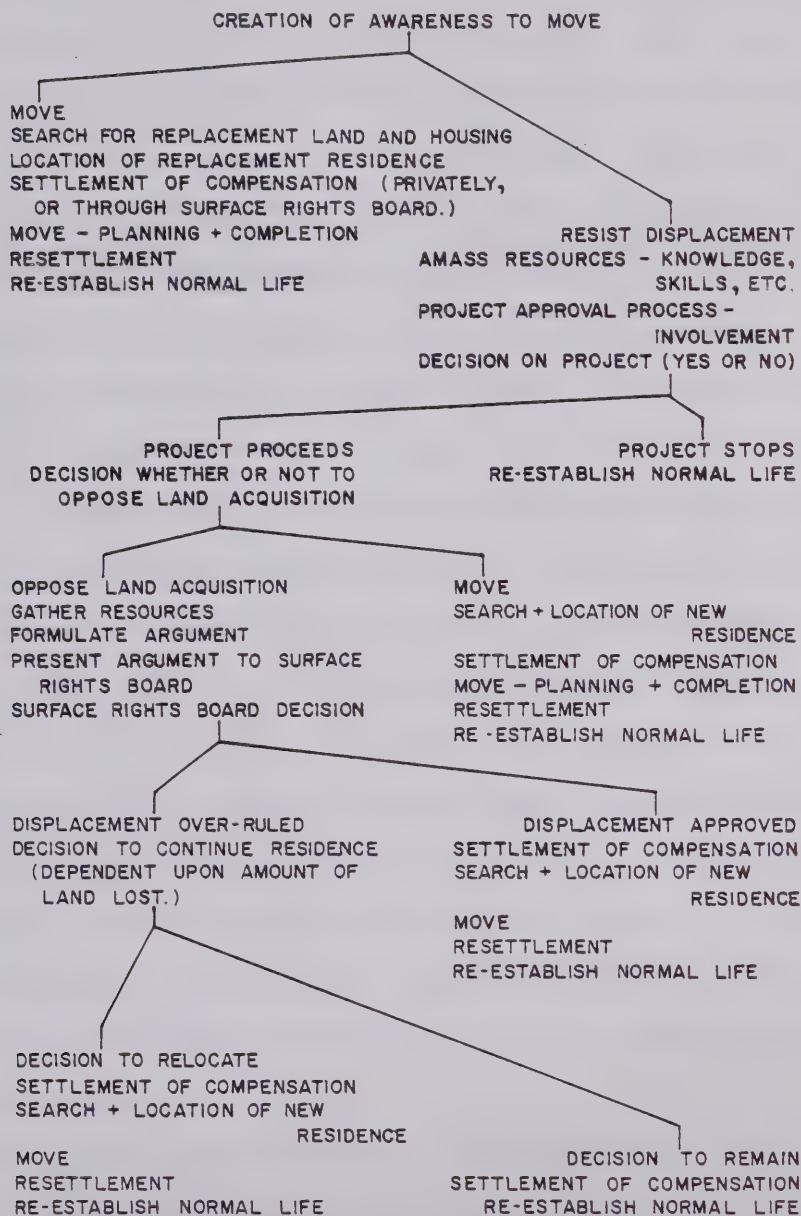
The processes of displacement and relocation experienced by the five families, although generally similar, had some specific variations. Those variations were dependent upon the situations the families were in, and the choices they made throughout the process. In one instance, a family was in the final stages of preparing to enter full-time farming. That move was predicated on a family operation which shared machinery, labour and financial assets. For them, relocating away from their existing location resulted in a severing of their farming arrangement. Other families were part-time farming with breadwinners employed off the farm. One had a number of children at home while another had children who were grown and living away from home. In the first case, the family wanted to remain in a location where their children could continue to attend the same school. For the other, staying in the community was very important because of its proximity to friends.

Two families had particularly strong emotional ties to their farms and wished to remain if at all possible. One family was residing outside of the area but needed a location which was in reasonable proximity to the City of Edmonton.

Figure 7 attempts to blend the experiences of each of those families into one flow chart depicting a generalized process of displacement and relocation. The chart indicates where specific decisions and resultant actions occurred throughout the process.

For each of the families, the initial knowledge of their possible

FIGURE 7
KEEPPHILLS DISPLACEMENT - RELOCATION PROCESS



relocation kicked off a period of evaluation, analysis and choice. Some families chose to accede to the requirement. For those families, the initial decision to move required subsequent choices which included: when to move, where to move to, what to take along, what to leave, what to do at the new location, whether to continue or begin full-time farming or to continue in their present jobs and what type of replacement land and housing to acquire. With those criteria, the families began to search and locate a new home.

During that period, from them first finding out about the possibility of the move to locating a new home, most families were also involved in negotiations with the company over level of compensation. The level of compensation obtained greatly determined what the family could afford in the way of replacement. In reaching a decision on compensation, the families needed to assess what they believed the land was worth and argue for that figure with the company. In some cases families felt that the figure offered by the company was fair and accepted their offer outright. In most cases, however, the offered price was thought to be too low. In those cases, the families often retained outside expertise (lawyers, appraisers, etc.) to assist with the negotiations. Occasionally, no agreement could be reached by the two parties and the case went before the Alberta Surface Rights Board for adjudication.

After compensation was settled, and new residences were located, the families acquired the new property and arranged for the logistics of moving their households to the new locations. Most often this was done with the assistance of friends and neighbours. That process involved deciding what to keep and to leave, packing, moving and

unpacking the household at the new residence. Once there, the family began to resettle, got to know their new social and physical surroundings, met new neighbours and located those services they required.

That process appeared to be fairly common to each of the families once they had reached a decision to relocate, or were in a position where they had no choice but to relocate. There were two points, however, at which families, after a great deal of thought and discussion, reached decisions to oppose their displacement and relocation. Initially, some opposed the project throughout the project approval process. One family in particular appeared at the public hearings into the project and argued against the project as it was being proposed. In order to develop their opposition, after making a choice to oppose the project, the family amassed resources (both knowledge and outside experts such as lawyers), formulated an argument and presented their position. After the government came down with a decision in favour of the project, the family had a second choice -- one more specific to their land (and not as generalized as a decision on the project). By law, Calgary Power could only acquire as much land as they legitimately required for their project. Their needs were open for question before the Surface Rights Board who ruled on the expropriation of the land. During public hearings before the Surface Rights Board, a family could have argued against the company's needs for their land specifically.

That argument was successfully given by another family before the Board. In their argument, the family showed that the company was asking for more land than was actually required. The Board

subsequently ruled in the favour of the family. As a result of the ruling, that family was not displaced from their residence.

At both of the decision points outlined above, families had a choice of whether to oppose the company or to move. If a choice to move was made, the family was required to search for and locate a new residence, obtain compensation for their land, move, resettle and reestablish themselves at their new location. Similarly, if the family chose to fight, but lost, they would end up proceeding through the same process. Only where they opposed the company and won was relocation not required. In that instance, the family needed to pick up their life where it had been prior to their opposition, and react and cope with the changes the development would have on their community and environment.

In every case, the families were required to attempt to regain a state of normality in their altered lives after their experiences. Throughout their displacement and relocation experiences, the families had to locate and develop their own resources needed to oppose the company, locate and move to a new residence and reestablish themselves at their new location. No relocation services or programs were developed or offered by either the company or the government.

In promoting and protecting their interests, the company had a vast array of legal, technical and financial resources. The residents of the community, on the other hand, had access to only those which they had or were able to acquire, given their knowledge, skills and financial resources. While provisions have been made for the Surface Rights Board to assign to the land-acquiring company the legal and other costs incurred by landowners in the preparation and presentation

of their cases, in one of the cases before it, the Board disallowed a large portion of those costs. Later, the information for which the costs were disallowed was used by the ERCB in determining the design of a portion of the project.

Furthermore, the Surface Rights Board was involved in only two of the twenty-seven parcels of land acquired for the project. Those residents who did not use the Surface Rights Board were not necessarily provided with any compensation for legal costs because the land negotiations were conducted between the buyer and the seller where the provisions of the Surface Rights or Expropriation Acts could not be enforced.

Perceptions and Attitudes Towards Calgary Power and the Displacement-Relocation Process

People in the interviews spoke openly of their perception of and attitudes towards the project, the company, their displacement-relocation and the manner in which Calgary Power approached the acquisition of land, the determination of compensation and the relocation of the families whose land was acquired. All of those interviewed had dealt with the same company landman.

In general, those families who were interviewed did not question the legitimacy and need for the project. They believed that the Keephills project was required in order to supply electricity for the rest of the Province. However, they did not wish to have to subsidize the project by having to shoulder business and personal losses resulting from moving, without being reimbursed. Some had mixed one hand, they had been employed and received income from the company,

Power. In general, however, attitudes towards the entire land acquisition process used by the company were primarily negative. Only one family appeared to be looking forward to their move to a new location; they believed that they would be better off in their new location. The majority of families saw themselves as going from a life situation (home, neighbours, community included) which was enjoyable and happy, to one which was neither. In the end, they felt weakened, believing that they would find themselves worse off than before. Most families were therefore reluctant to move and looked upon their relocation with disfavour.

Because of the number and their significance to the families who were interviewed, comments on the perceptions and attitudes towards the land acquisition process have been taken from various families and presented below in summary form, according to content.

Dividing the community. Some interviewees felt that the company used tactics to divide the Keephills-Highvale area into two areas: the Highvale area, predominantly north of Secondary Highway 627, handled by a landman; the Keephills area, south of 627, handled by a company public relations official. The two very different faces presented by these two representatives of the company to the area caused confusion and division of opinion among neighbours. Each company representative could work his own territory without the other's apparent presence, while consulting with this partner in private to agree on overall tactics in the community.

Some of those interviewed believed that in that way, the two sub-communities of Highvale and Keephills were kept apart, with Keephills' residents believing that the company was honest, sincere,

trustworthy, sensitive, and fair in its dealings, while the Highvale residents, having had dealings with the landman, experienced the company to be untrustworthy, manipulative and unfair. Most families referred to psychological tactics used by the landman in acquiring land, including: playing on an individual's emotions, attempting to lead people to believe that he had befriended them, encouraging individuals to avoid the problems and heartaches associated with using legal procedures by stressing the problems associated with those procedures, and providing offers which were below market value for the land while telling people that it was fair.

Intelligence gathering. Most of the families interviewed felt that the company landman used a strategy of casing the community and finding out what he could about those families whose land he was going to attempt to acquire, in order to determine how best to approach the family and affect a sale.

After gathering information on each of the families, the landman attempted to obtain a sale from those from whom, he had determined, lands might be most easily acquired. Individuals in the interviews indicated that some families in the area, because of their financial situation or life stage and age, were willing to sell land fairly soon after the initial contact with the landman. Others, because of a lack of knowledge of their legal rights, or because of a past history which made them more susceptible to real or perceived pressure or coercion to sell, also sold relatively early in the land acquisition process. (Two of the families in the area, for example, had histories which included experiences of detention or imprisonment for political reasons prior to their immigration and settlement in the Keephills-Highvale area. There

was speculation among interviewees that those experiences may have been a strong factor in the early sale of their lands.)

Deception. In the process of land acquisition, the landman had apparently used much the same approach with each of the families in the initial and subsequent contacts. Those interviewed all expressed the view that the landman was very friendly in his dealings with them. To some, that friendliness was sincere; others who were interviewed felt that the friendliness was deceptive. They believed that it was only a guise to allow the landman to gain the confidences of the families and their individual members in order to manipulate them into a sale. In some instances, people mentioned that the landman had approached individual family members and attempted to set members against each other over the issue of whether or not to sell.

Misleading information. In the contacts of the landman with most of those who were interviewed, he had made no attempt to explain the legal rights to the landowners. People indicated that he, in fact, misled families by indicating that if they did not sell their land to the company, Calgary Power would forcibly take the land away and the landowners would get less than what the landman was offering. The landman, interviewees stated, attempted to discourage landowners from proceeding through the surface rights process by stressing the associated difficulties and problems.

Maintenance of secrecy. Throughout the negotiations, the landman, according to those interviewed, attempted to maintain secrecy in his actions and in the land dealings. Some viewed this secrecy positively; they commented that their sale price and whether or not they had sold was something they considered private. Others believed the attempt at

maintenance of secrecy was another tactic used by the company to keep local people ignorant of what they were doing; these interviewees said that the secrecy also helped the company to acquire the lands for less than they would if the negotiations had not been secret. This perception was encouraged by their knowledge that the purchase prices registered with the Land Titles Office on the transfer documents were often less than the actual sale price. (In the legal transfer of land, a purchase price is provided and filed with the Land Titles Office within the transfer documents. Those documents are then available for public inspection.)

Infrequent Contacts. During the negotiaton process with the company, people commented that there were long periods when they didn't hear from the landman. In one instance, the landman visited the family involved, told them that their land was required by the project, and offered a price which the family felt was substantially below the replacement value of the property. After the family relayed their feelings, the landman left. Over the next several months, the family, despite several attempts, were unable to retrieve the agent to discuss the matter with him further.

That situation, according to those who were interviewed, was not atypical. Many times landowners were left, they indicated, for weeks and months after the initial contact, or at some other point during the negotiations process. That situation resulted in increased anxieties within the family.

Lack of written offers. During the negotiations, the interviewees indicated that there was a lack of written offers for purchase. One family commented that the land agent approached them by asking how much

it would take to buy the family's land, putting them in a defensive position where they would state a price and then be required to defend it. Only after a verbal agreement for sale was reached, did the landman commit to a price on paper. In that way, the landowners had nothing written down to which they could refer through the negotiations.

Lack of consistent approach in land price determination. In all of the interviews, one point was emphasized; there appeared to be little relationship between the quality of land and improvements and the final purchase price for the land. Those who were interviewed strongly believed that the final price was related primarily to how well the landowner fought the company, while the quality of the land or its present use were only incidental to the determination of the price.

In general, those who accepted the initial offers to purchase from Calgary Power were compensated, interviewees believed, at the lowest levels. Those who hired lawyers, appraisers, who showed determination in fighting for their interests, and who were willing and able to wait out the long negotiation and legal process, in the end received substantially higher levels of compensation or lost less land, the interviewees felt. The landowners who had received over \$200,000 for their land had been negotiating with the company for over two years, were highly educated, had retained professional assistance to aid their position, and had been able and willing to undertake actions to protect their interests. They did, however, appear to be atypical of most of the people in the area.

Some of those interviewed indicated that although they had initially wanted to see themselves through the entire process, they had

lost heart before reaching the end and had "thrown in the towel". In doing so, they believed they had received less than if they had gone through the surface rights procedures.

Acquisition of land from company employees. Some of the land for the Keepphills Power Plant was acquired from employees of the company and its contractors. The potential existed for pressure to be brought to bear on the employee-landowners to sell and/or to not create problems for the company by fighting against the land acquisition. There were mixed comments on the issue from those who were interviewed. Some employees were specifically told not to let their employment were pressured at work by supervisors in an attempt to influence their decision in favour of the company.

Relocation-related effects

Throughout the interviews, a number of effects were mentioned which, people believed, resulted from their displacement and relocation. The area of financial compensation and land purchase appeared to be paramount to most of those who were interviewed, with other types of effects being discussed as secondary concerns. That priority in responses could have resulted because interviewees thought the economic effects were more easily quantified and appeared to be more acceptable to discuss in our materialistic world than social or psychological effects. That response could have also occurred because the degree of dissatisfaction with the land purchase and compensation process was so pronounced, and reflected such a great impact on the livelihood of the families, that the economic effects overshadowed, or detracted from the time families needed to fully examine other areas of

their lives that were changed by the displacement-relocation.

Economic effects: The economic effect of the relocation resulting from the Keephills development most often commented upon in the interviews was the low level of compensation.

Low levels of compensation. In no case did those who were interviewed state that the level of compensation paid by the company enabled the landowner to obtain replacement lands without having to borrow additional monies, or to decrease their capital reserves. Table 5 presents information on land sale prices gathered by COKE and included within their brief to the Alberta Select Committee on surface rights). While some of those interviewed pointed to the larger farms that some vendors had obtained, others who were interviewed indicated that those new farms were located much further from Edmonton and agricultural supply firms, and therefore involved higher operating costs.

One family did appear to have benefited as a result of the displacement. This family had been in financial difficulties prior to Calgary Power's land acquisition program, and had been unable to meet mortgage obligations. Foreclosure on the land was imminent when Calgary Power offered to buy it; with the sale proceeds, the family was able to pay their creditors and still had some capital remaining. However, some people interviewed thought that the price the family obtained for the land was low.

Losses in income and capital. Interviewees indicated that they had incurred, or would incur, losses in income and increased costs at their new locations. Two of the families had moved or were about to

TABLE 5

SUMMARY OF LAND PRICES¹ PAID BY THE COMPANY IN THE KEEPHILLS AREA²

OWNER	LOCATION	DATE	AMOUNT ³
1. Leckner	SE7-52-3-5	Dec. 13/76	\$ 37,500
2. Leckner	NW6-52-3-5	Dec. 13/76	40,000
3. Leckner	NE6-52-3-5	Dec. 13/76	37,500
4. Rosin	NE25-51-4-5	April 5/77	37,500 ⁴
* 5. Rosin	NE25-51-4-5	April 5/77	48,500
* 6. Gashnitz	NW12-52-4-5	May 2/77	49,000
7. Stieger	NE18-51-3-5	May20/77	40,000
* 8. Stieger	SE19-51-3-5	May 20/77	50,000
* 9. N.Landsman	SE11-52-4-5	June 8/77	84,000
10. Triangle	SW1-52-4-5	June29/77	43,333.33
*11. Triangle	NW1-52-4-5	June 29/77	100,000
12. Triangle	NE3-52-4-5	June29/77	43,333.33
13. Triangle	SW11-52-4-5	June 29/77	43,333.33
*14. Albert	NE5-52-3-5	Sept. 29/77	140,000
15. Albert	NW5-52-3-5	Sept.29/77	30,000
16. Porter	NW19-51-3-5	Sept. 29/77	43,000
17. Shellion	SE6-52-3-5	Oct. 3/77	46,500
*18. W.E. Quigg	NW36-51-4-5	Aug. 24/78	48,500
19. W.E. Quigg	SW2-52-4-5	Aug. 17/79	79,500
*20. Albers	SW25-51-4-5	Sept. 26/78	114,500
21. Albers	NW25-51-4-5	Sept. 26/78	48,500
22. Albers	SW36-51-4-5	Sept. 26/78	48,500
23. Albers	SE35-51-4-5	Sept. 26/78	48,500
*24. Beck	SW7-52-3-5	Jan. 24/79	85,000
25. Beck	SW12-52-4-5	Jan. 24/79	52,000
26. Beck	NW9-52-3-5	Jan. 25/79	45,000
27. Beck	SW9-52-3-5	Jan. 25/79	45,000
*28. Beck	NE7-52-3-5	Feb.22/79	99,000
29. Beck	NW7-52-3-5	Feb. 22/79	48,000
*30. Wagner	SW5-52-3-5	Sept. 13/79	111,000
*31. Schuhardt	NW8-52-3-5	Sept 25/79	100,000
32. Schuhardt	SW8-52-3-5	Sept. 25/79	60,000
*33. C. Landsman	SE12-52-4-5	Nov. 6/79	110,000
*34. Leshner	NE34-51-4-5	Feb. 12/80	140,000
35. Leshner	NW35-51-4-5	Feb. 12/80	70,000
*36. Glick & Kupfer	SW6-52-3-5	Oct. 7/80	150,000
*37. Highvale Trading Co.	NW34-51-4-5	Nov. 18/80	191,500

Footnotes

* Property with homes on it.

1. Acreages are not included. These are all quarter sections.
2. These are prices noted on the land titles and are not necessarily proof of the actual selling price.
3. The valuation on the title is a declaration by the new owner (the Company) of his impression as to the property's worth.
4. In this case only one figure appeared on the title and a member of C.O.K.E. assigned a figure to each quarter.

move from a quarter section to an acreage. For one family, the move resulted in the loss of a garden which provided vegetables for much of the year. The soil at the new location required substantial time and work before gardening was possible.

When families did not purchase replacement properties (for instance, when they bought an acreage rather than a farm), capital gains taxes had to be paid. In other instances, when the final settlement occurred months after the land was vacated, inflationary impacts were severe: the interest paid on the difference between the initial and final payments was far less than the increase in the value of the land.

Where a farm was sold, any future income from the farm was lost, particularly when the farm was not replaced. That income came not only in the form of crops and agricultural products, but also in other forms, including recreation, trapping receipts, and food. In addition, in the move from a farm to an acreage, many things had to be left behind because of the lack of space at the new location. In one instance, the original farm buildings had consisted of a house, a garage and numerous buildings; the new location had only a house.

Increased costs and expenditures. Some of the additional costs at the new locations were said to include increased taxes (from \$150.00 per year to \$850.00 per year in one case), and increased travelling time and costs to get from the new location to family, friends, businesses and retail outlets, social functions and work. As well, a move from a farm to an acreage resulted in increased costs in the area of lifestyle and recreation. Before, the family recreated on their own and neighbour's lands, to a large extent; the new location did not

afford that opportunity. New neighbours were also more oriented to away-from-home recreation (e.g. theatre, dining out, camping), with resultant effects on sharing of recreational opportunities.

Families incurred costs in the protection of their interests. Lawyers and appraisers were hired by some. In one instance, those costs were not refunded in the final settlement because the Surface Rights Board ruled that the costs were unwarranted.

Costs and risks of moving. When moving, people commented that they found themselves in the position of having to bankroll the move, and the purchase of the new lands. In two of the five cases, where the negotiations were long, the families were placed in the position of going out and purchasing replacement lands prior to receiving the full settlement for the land acquired by Calgary Power. In both instances, the families indicated that they were taking risks which were not recognized in the financial settlement, or by the company and government. In one instance, a family received a partial settlement and were required to move after the receipt of those monies. Mainly because of their inability to purchase a replacement quarter in the locality for the initial settlement figure, the family concluded by purchasing an acreage. In a subsequent decision by the Surface Rights Board, the family received a supplementary award, almost equal to the initial settlement. If the family could have received a full settlement initially, they probably would have been able to purchase a replacement quarter. In that instance, the family would have been taking an even greater risk if they had, in the beginning, purchased a replacement parcel because they had no guarantee that the final settlement would have resulted as it did.

One other family did take that additional risk, and purchased a replacement property. In the final award, their costs were covered, but again, they had no assurance that the cost of the new property (which was substantially higher than what the company had been offering) would be covered by their settlement with the company.

Calgary Power as an employer. Outside of the issue of acquisition of property, a number of those interviewed commented upon the role of Calgary Power as a major local employer. Many people were able, after Calgary Power came to the area, to increase their income by working for the company at the power plant. That increased income greatly enhanced the economic standing of a number of local families, enabling them to improve their homes, take vacations, buy additional lands, and improve their farming operations.

Some people said in the interviews that they thought Calgary Power's presence in the area also enhanced the position of those who remained after the development. In particular, company employees, working in the area and wanting to live close, provided a ready market for anyone who wished to sell land outside of the development area. Increased land subdivisions occurred in the area, in part to satisfy the demands of company workers for acreages. If families who relocated outside of the area after the sale of their land to Calgary Power, however, did not receive benefits from employment with Calgary Power and increased land prices.

Physical health. Few comments were made on the effects of relocation on the physical health of family members. There were comments from some that they suffered from upset stomach and loss of sleep at

various times throughout the relocation process. Those effects occurred particularly at times when decisions were necessary, and especially in the initial period after families first learned of the possibility that their land and homes were required for the development. One individual, who lost land to the project, died of a heart attack following the sale of his land; however, there appeared to be no specific evidence to indicate that the displacement was the cause.

Generally, the author concluded that the method of data collection used in this study was unsuitable for gathering information in this area. People had difficulty remembering specifics, and were unable to say if the effect had been created by the project. A second approach using a revised methodology would be required if more conclusive results were required.

Psychologicalmental well-being. During the interviews, individuals made comments about the impact of the displacement-relocation on their psychological and mental well-being. Effects which were mentioned included stress and anxiety, loss of meaning in daily life, sorrow, fear, a feeling of persecution, a diminished sense of security, a redirection of emotional and mental energies, and the acquisition of new skills and knowledge.

Stress, anxiety and loss of meaning. The stress involved in the relocation process was mentioned by most of those interviewed. Initially, the decision of whether or not to accept the company's claim to the land created anxiety. People commented that they were unsure of what to do, unaware of their alternatives, and ignorant of their legal

rights.

Those who were interviewed commented on their anxiety and that of their neighbours upon first learning of the development. In some instances, the families were initially told that their land would not be required; they were relieved from their concerns, only to find out later that their land was in fact, needed after all. They spoke of sleepless nights, loss of appetite, upset stomachs and loss of heart. In one instance, a member of one family was in the field when told of the need for their land. He got off the tractor, indicating that the work was of no meaning since the land was to be taken anyway. For three years, routine maintenance on the farm was ignored and the farm began to deteriorate.

Sorrow. All of those interviewed who had moved from their old property showed sorrow for the loss of their land and homes. Two families, both of whom had lived on their properties for over 20 years, expressed great attachment to their land. One family stated that they hated to drive by their old home because it had been so drastically changed by the development. Nothing of the old remained, except for the shape of the land.

Fear and persecution. Some of those interviewed alluded to feelings of persecution by the company landman, who was persistent in attempting to obtain a sale, and by neighbours who always enquired how dealings with the company were going, whether they had sold and for how much. One belief expressed by one family but, according to those interviewed, felt by many others, especially older landowners, was that opposing the company or its development would only bring trouble to the family.

Impacts to sense of security and safety. Some saw the need for the relocation as a threat to the security their home provided. Those who had gained a sense of security from their home, experienced a loss in that sense of security after they had been required to move. While most of those interviewed commented on the negative aspects of the relocation, one family expressed more positive feelings about the move. For them, the old home, being located near a busy road, posed a threat to the safety of their family, and its location resulted in an unpleasing physical environment where noise and dust were often present. For them, the move was a chance to move to a safer, quieter, cleaner location.

A redirection of emotional and mental energies. The knowledge that families were likely to be displaced from their homes appeared to monopolize their thinking and discussions initially. Daily routines and activities, which had hitherto taken up much time and energy, were forgotten as the focus turned to the issue of displacement and what to do about it.

When the decision was made to resist the displacement, it appeared from those interviewed that much of the family's efforts went towards preparing for, and engaging in, opposition. Little time and energy appeared to be directed towards previously regular daily life activities. When the decision was made to accept the relocation, most of the available time and energy was directed towards finding a new home, moving and re-establishing the family at the new location.

After the move, much time was given to discussing what went right, what went wrong, what was left to do, and how they felt about the experience. A number of those interviewed alluded to the emotional and

mental energy that holding out and opposing the company and the development had taken. People indicated that they, themselves, and many others who had thought originally to oppose the relocation eventually gave up. Comments such as "we couldn't take it" or "we didn't have the heart to continue" were made.

Acquisition of new skills and knowledge. Throughout their involvement with the development and with relocation, people commented upon the new and different things they undertook, and upon the pressures, stresses and anxieties associated with those undertakings.

Some of those individuals took on new positions of leadership within the community, stood up and voiced opinions at meetings and in the preparation of their cases and negotiated with Calgary Power and their landmen.

Social life. Those interviewed expressed a number of comments and concerns regarding the effects of the development and resulting relocation upon the social life within the surrounding area.

Development of a community issue. A great deal of attention in the community appeared to be focused on those families who were being relocated. In part, because of the long life span of the power plant and mine, and the large area it would ultimately affect, interviewees commented that how they were dealt with was viewed as being a harbinger of the fate of others in the future.

Community conflict. Those families in the area who were required to relocate often identified themselves as being part of the Highvale community, while those who had been cooperating more generally in project planning with Calgary Power identified themselves as being part

of the Keephills community. The differences in the perception of the residents of the Highvale and Keephills communities about how Calgary Power was operating in the area led to intercommunity conflict.

Those conflicts may have been largely hidden, residents indicated, but they were present. That situation created a split between the residents of the two communities which had not previously existed, except in the form of a friendly rivalry over sports and community events. At the level of personal relationships between community residents and neighbours, people also spoke of conflicts resulting from the development and the land purchasing. If one neighbour sold his land for a high price, he was labeled as greedy; if he sold it for a low price, he was thought of as being naive.

Impacts to community interdependence. The old community people indicated, included an interdependence of neighbours. When people moved, that interdependence was sometimes broken, because distance created difficulties in visiting and cooperative efforts. At the new location, families indicated that the old sense of belonging, neighbourliness and interaction was not present. The relationships which had been developed over a period of years were left behind, and new ones were required to be formed at the new home. At the old location, neighbours, family and residents used to do things for one another; at the new location, families had to become more independent of others. Neighbours at old locations used to keep an eye on one another and each other's property; at the new location, that sense of security was non-existent because those reciprocal relationships weren't present.

Loss of personal-social history. Moving from one community to

moved experienced a general absence of community trust as they used to know it. That absence displayed itself in difficulties which would have been abnormal for them in their old community, such as troubles in cashing a cheque, establishing credit and obtaining favours.

Commitment to community. People who moved outside of the area often chose to stay within easy commuting distance when possible. While some did relocate quite far away (Northern Alberta and British Columbia), many of those still came back frequently to attend community functions and to visit. For residents who had only recently moved into the community, the development and the relocation stopped them from putting time and energy into maintaining and improving the community.

Politicization. Those members of the community who opposed the company in their efforts to receive approval for the power plant and to acquire lands for the project appeared from the interview to have acquired new social and political skills (i.e. to resist developments). Some of those interviewed had formed working relationships with lawyers and other specially skilled or informed persons, as a result of their opposition. Some of the individuals and families interviewed had prepared and sent letters to the company and regulatory authorities, and presented interventions to the public hearings held on this project. Some had also taken executive positions within the community organization formed to deal with the project and the company (COKE).

Skills which had been either developed or sharpened in dealings with the company and the government included: writing skills; the making of verbal, public presentations; situation and information analysis; the ability to use and work with lawyers and other professionals, debating skills, questioning and information obtaining

skills, and political strategy and tactical development skills.

After their experiences, the people who had opposed the displacement-relocation were also quite aware of their legal rights and those of the company surrounding the development. One resident, as a result of his involvement with the project, obtained a provincial landman's license. Most of those interviewed believed that they would be able, as a result, to deal effectively with their existing situation and any others which might develop in the future.

Summary

The five families who were interviewed held a variety of opinions towards Calgary Power, its power plant development and their own consequent relocation. In the main, the families held negative views about the approach employed by the company in the land acquisition process. Some of those interviewed believed that the company acted in a fair and equitable manner in their dealings with the local people; most, however, believed the opposite. In general, people appeared to believe that the company approached land acquisition as a business deal, where the object was to acquire the land at the least possible cost, and used whatever methods available to that end. Social or personal costs associated with the land acquisition were ignored. Interviewees indicated that those who received the highest level of compensation were those who opposed the company, were skilled negotiators, and were unafraid to employ legal and other resources in their opposition. Those who lost the most were those who settled relatively early in the land buying and who were willing to accept the offers made by the company.

In general, people believed that the approach used by Calgary Power in the acquisition of land in large part resulted in the community's shift from its original approach of working in good faith with the company to one of distrusting and opposing the company.

In the interviews, families indicated that they suffered negative economic effects from levels of compensation that were inadequate when compared to the actual costs of relocating, the losses incurred in moving, the losses in income and income in kind from the previous property, and increased costs at the new location.

While people did mention some health problems which developed during the relocation process, major problems were not indicated. However, interviewees indicated that the relocation had resulted in a variety of effects on their psychological-mental well-being, including stress, anxiety, sorrow for the loss of their previous home and land, loss of personal sense of security, and loss of meaning in daily life.

From a social perspective, the relocation process and the company's actions resulted in the development of conflicts within and between the communities, deterioration in the maintenance and well-being of the community, a loss of informal and formal social support systems for those moving, and a loss of social history and trust.

FOOTNOTES

1. The rapid increase in the number of interventions may be partially, but not largely or completely, a result of the role of the public participation enhancement function of the Department of the Environment. The author has witnessed a rapid rise in the rural activist movement in Alberta over the past seven years. This growing activism probably encouraged development of the catalyst role of Alberta Environment just as much as the government department encouraged the activism.

2. That overview of the positions and perspectives of farmers and power companies flows from the author's experience since 1976 with power developments in Alberta. Each company and community, however, have provided minor variations on these major themes.

CHAPTER VI

INTERPRETATIONS, ANALYSIS AND RECOMMENDATIONS

Introduction

In this chapter, findings from the two data sources for this thesis are discussed and analyzed, and implications are drawn. In keeping with the stated goal of this thesis, to present direction on improvements to existing displacement-relocation experiences in Alberta, the chapter concludes with a series of specific recommendations for enhancing the present process.

The Displacement-Relocation Process

Initially in this study, the displacement-relocation process was seen to involve three phases: decision, move and resettlement. As a result of the incorporation of additional concepts from other literature, a more detailed conceptual framework was developed. In that framework, the impacts stemming from a specific displacement-relocation process surrounding a proposed resource project were seen to be modified by two major factors: the particular characteristics, capabilities and resources of each individual and family to deal with those impacts, and the type of relationship that each family had with their previous community (economic, social, psychological and physical components included). Those two factors are examined in greater detail later in the chapter.

Focusing on the decision-move-resettlement process, the most significant findings of this study related to the specifics of the

decision phase. With the Keephills-Highvale families and with others in similar situations, the decision of whether or not to relocate was often missing. That requirement to move complicated the relocation process by adding new dimensions to the decision phase. The decision phase was simplified because the decision to move was (supposedly) removed. However, in situations where displacement was not completely required, the decision phase was complicated because some families decided to question the legitimacy of the displacement and to oppose the development and the displacement.

For those families who decided to oppose their relocation, time and energy was spent on organizing opposition, and carrying it out. (Some families were able to carry the opposition to a conclusion, while others gave up somewhere along in the process.) If their opposition was successful, the requirement to relocate was removed. The families were then left in a situation where they retained the right to choose whether or not to relocate (meaning they still could - but would not be compelled to do so).

Those families whose opposition was turned aside, who gave up their opposition before a conclusion, or who chose not to oppose the relocation, were placed in situations similar to one another. For them, the choice of remaining was not available; their only option was to move. They did, though, retain the ability to choose a new residence location.

For most individuals and families, the moving phase was generally similar. The logistics of moving included packing, culling possessions, arranging for the transport of household and other goods. In some situations, distances of relocation were large, and cultural

differences were often significant and pervasive. For the Keephills families, however, distances and cultural differences generally created few major difficulties. In establishing themselves, most of the families whose experiences were studied in the literature, like the Keephills families, typically moved small distances, stayed close to or had access back to their original communities, remained within the same culture, spoke the same language, and utilized similar, formal social institutions (for example, schools, churches, government agencies, human services, and retail stores). On the whole, while the type and degree of adaptation that was required of the various groups in their relocation varied, the process was similar. Once at the new location, every family needed to learn about their new community and social environment. Neighbours and social contacts were developed, relationships were established, expectations of behavior were learned and adapted to, institutions which serviced the residents of the community were located and dealt with, economic activities were established, and goods and services were obtained.

The implication of those findings for policy are twofold. First, creating a situation where resistance to a displacement was necessary resulted in the misdirection of human energies which could have been better used in other ways (either directed towards adapting to the displacement-relocation, or addressing those problems and issues which would have arisen in daily life). For that resistance to have occurred, and for it to have been as successful as it was with the Keephills development, implies that the land acquisition program carried out by Calgary Power was inappropriate. Either it occurred too early, at a time when actual project land requirements were not known,

or the company pursued a practice of acquiring more land than was reasonably required. In either case, a change in practice is warranted.

Second, the problems and issues which were found to arise in the move and the resettlement of families supports the need for a planned approach to displacement-relocation which would address those issues and problems, and provide any assistance required for families to achieve a reasonable level of adjustment in their new environment.

Characteristics of Individuals and Families

Several characteristics of individuals and families were postulated in the conceptual framework of this thesis to, in part, determine or modify the impacts from displacement-relocation. Those characteristics which were believed to be important were: 1) perceptions and attitudes, and 2) personal characteristics, resources, skills and knowledge.

Perceptions and attitudes

Initially in Chapter II, several possible perceptions of the displacement-relocation process, as viewed by those being displaced, were examined. The author's belief was that perceptions of the process could predetermine the attitude and mindset of families, creating enthusiasm or despair, and thus affect the success of resettlement and reestablishment.

The findings of previous research, has generally indicated that the attitude of families towards displacement-relocation did appear to affect their adaptive abilities and in part, at least, predetermine the

success of their relocation. Those who approached the experience with a negative attitude appeared to have greater difficulty in achieving successful reestablishment. Families who saw the relocation as an opportunity for growth and advancement appeared to fare better and reach a greater degree of satisfaction in their new residence. Some families, however, even though they approached the relocation with a positive attitude, experienced a real decline in their economic and social position; their achievement of successful post-relocation adjustment was curtailed by that loss. That finding would therefore indicate that while attitude is important, other factors also heavily influence adjustment.

In addition to what was expected from discussions in Chapter II, however, the review of relocation studies also provided additional information on displacement-relocation attitudes. That review indicated that in situations where communities were negatively affected by a development, and the approach and practices of a developer, negative perceptions and attitudes were translated into political action towards the project and developer. That organized resistance created delays and generally affected the planning and development of future projects. In addition, when projects were proposed on an incremental basis, negative attitudes also developed. Communities and families were willing to adapt to one major change, but were not willing to accept multiple waves of change. When the approach and practices of a developer were seen to be legitimate, fair and creating benefits to those being relocated, however, attitudes towards both the developer and the project were found to be positive.

Knowledge of a development, and its potential effects upon

individual families and their communities, were also found to affect attitudes towards the project and the displacement of families. When information was withheld, community and individual opposition to a project developed. The availability of that information to affected people, while not ensuring support, allowed individual and collective attitudes to develop and be formulated on the basis of the information and a determination of potential effects. When information was not available, generally negative attitudes developed towards the project and the developer.

The information gathered during the Keephills interviews, by and large, supported the finding from the literature on developer approach and practices and its effects upon public attitude formation. With the Keephills project, the approach and practices of the developer were perceived by the community to be inconsistent. While the project planning staff were sensitive to the needs and position of the affected community, the staff and practices of the land acquisition group were seen to be totally the opposite (the land acquisition program severely undermined the efforts of the project planning staff in obtaining community agreement and support for the project). Negative attitudes developed towards the company, even though displaced families believed that the project was needed and that it would require their relocation. That opposition and resistance which developed as a result of the land acquisition efforts of the company has decreased the level of trust and credibility the community has held for the company. In the future, it appears that that resistance will place increased strain on community-company relationships and create consequent problems for the company (everything the company wishes to do in the area will be highly

suspect in the eyes of the community).

Opposition by the Keephills families towards the project and their displacements resulted from three major perceptions: inadequate compensation, the unnecessary acquisition of lands not needed by the project and the lack of fairness and justice in the treatment received by families who were losing land and (in most instances) being displaced. These perceptions created negative attitudes which were carried into the displacement-relocation experience and subsequently prejudiced attitudes towards the move (and in some cases, towards the new residence and community).

Those findings of this study carry a number of implications for developers and for displacement-relocation programs and policy. First, this study indicates the essential requirement for a well-thought-out approach to communities prior to a company proposing a development which could affect those communities. An approach which is sensitive to the position and needs of the affected families, and incorporates them into project planning and implementation, is essential. The Calgary Power Keephills Development illustrates the necessity for a consistent and coordinated approach by all arms of the company in order to prevent problems from arising.

Initially, information must be presented to communities in ways which will inform them of the development and its implications, encourage the raising of concerns or problems, resolve those within project planning, if possible, and report back on the results. That type of interactive process is required throughout the life of a development. If sincere in its design and implementation (i.e. not being used primarily as a public relations exercise), it would help to

deal constructively, in a preventative manner, with problems which could arise because of the development of negative perceptions by residents impacted by a company and its project. Implicit within that approach is that the company would be willing to alter its development to meet the needs of the community, just as the community would be willing to change to accommodate the development.

Over and above the approach needed to establish and maintain a positive working relationship between the company and the community, negative perceptions of the displacement-relocation process and the company would still exist if affected families believed that they were going to be disadvantaged by their experience. In order to counteract those perceptions, it would be necessary to first ensure that those families would not lose as a result of their displacement-relocation, and second, ensure that the families were conscious that they were not going to be disadvantaged.

This author acknowledges that attempts to promote positive attitudes towards projects, developers and displacements will not likely result in a total elimination of negative attitudes. However, to achieve a situation where the needs of the displaced families and affected communities have been satisfied and the resistance and opposition reduced to tolerable levels would be desirable. Achieving that objective would assist in halting any trend which may have already developed towards increased resistance to developments, and ensuring that delays to projects required in the public interest were minimized.

Personal characteristics, knowledge, skills and resources

Through the concepts surrounding the adoption of innovations, the initial belief expressed in this thesis was that certain individuals within any community would be better able to deal effectively with externally created changes such as those created by displacement-relocation. Those individuals were thought to be typically the more successful members of the community (better educated, higher socioeconomic status, more worldly, and wealthier).

Throughout the studies on displacement-relocation, certain individual characteristics did appear to be correlated with positive and negative attitudes and greater or lesser capability to deal with displacement-relocation. The greater the length of residence, the greater was the likelihood and degree of negative attitude and effect. Families and individuals who were satisfied with their previous location (friends, home, community, physical environment) stood a greater chance of developing negative attitudes to displacement-relocation and to incur negative effects. Those individuals and families who had greater resources (such as economic awareness, general knowledge, and business and organizing skills) and higher socioeconomic status were more likely to have positive attitudes towards development and displacement-relocation and to survive the experience with the least negative effect. In sum, it appeared that those who were in the best life position prior to the relocation, and who possessed the greatest capability to protect their self-interest (to ensure that they benefited from the relocation, or at least did not lose as a result of it), were most likely to both have a positive attitude towards displacement-relocation and to receive the least impact. Those who

were satisfied with their previous situation, and did not possess either sufficient resources or capability to protect their interests, were likely to develop negative attitudes and to lose as a result of their experience. From the information gained through the Keephills interviews, it was difficult to clearly correlate personal characteristics to the end result of the displacement-relocation experience. Most of the families who were interviewed were very similar in a number of characteristics including income, socioeconomic standing, education, and organizational involvement. In a few instances, however, some differences were apparent. One family who was particularly well educated, and had previously dealt on a professional level with large bureaucracies and companies, was able to obtain one of the highest compensation settlements, as might have been expected (using adoption of innovation concepts).

Certainly, those families who had retained additional expertise appeared to have achieved a better settlement with the company than they would have if they would have accepted initial offers (for example, obtaining a higher settlement, or being able to retain their home). Characteristics which appeared to influence whether or not families opposed the company's actions and were able to obtain enhanced settlements included personality factors such as stubbornness, determination, patience, strong will, and innovativeness. Those factors also influenced the way in which families approached their displacement-relocation.

In general, however, the finding of the review of studies and, to some extent, the findings from the Keephills interviews, indicate the existence of differential capabilities to deal effectively with the

displacement-relocation experience. Those findings indicate that without the provision of assistance as part of a displacement-relocation process to even out the level of capability by providing external resources, particularly to those who are unable to adequately look after their interests and cope with the experience, many families will be unable to adjust appropriately to their experience. Clearly, then, any displacement-relocation program developed would need to take those differential factors into account, and provide adequate levels of assistance to all displaced families and individuals.

Effects of the Displacement-Relocation Process

In the conceptual framework for this thesis, a series of potential impacts from displacement-relocation was presented. Those effects which were highlighted for examination included social, economic, psychological-mental well-being and physical health effects. This section of the chapter deals with the findings from this study of impacts of displacement and relocation on those four areas.

Economic effects

Initially in Chapter II, the types of economic and financial effects which were thought likely to develop as a result of displacement-relocation included income and expenses associated with leaving one location, moving to another, and reestablishing at that new location.

In the review of studies on displacement and relocation, moving from the original residence involved leaving behind jobs and businesses, resulting in loss of income and capital. Material goods

were often left behind because either they were difficult to move, or there was no room or need for the goods at the new location. Moving away from rural areas, particularly, resulted in losses in the income-in-kind which existed in the form of food (e.g. agricultural produce and garden harvests), and recreation (e.g. trapping and fishing).

In the Keephills interviews, the losses of gardens, recreation and agricultural products used for food were also mentioned. One other major cost not covered in the previous studies, however, was the cost involved in resisting the project and the displacement, and obtaining an adequate level of compensation when displacement did occur. Hiring legal, financial, technical and other expertise was costly; those costs were not completely covered in the compensation received, even when they were documented. Often those costs were borne solely by the landowners because they were not considered to be related directly to land acquisition.

In the literature and in the Keephills interviews, expenses were involved in locating a new residence (travel expenses, time, legal/financial expenses), and moving (packing, loading, moving items from old location to new, unpacking, and refurbishing the new residence). Losses in capital and material goods were also noted; cattle, agricultural machinery and other goods were often disposed of at times when prices were low. Timing, in general, presented problems for farmers because it altered the general patterns which they had employed in maintaining their operations. In particular, moving during the winter or spring created expenses higher than normal (for extra feed, shelter and other requirements). The time delay between determining

and receiving full compensation and having to acquire new property also created losses from inflation. Often, land prices escalated more than interest on the capital allowed, resulting in landowners having to purchase lower priced land than they expected to. By the time some landowners had received their final settlement, the market value of the land had greatly surpassed the level of compensation received.

Reduced incomes and increased costs were typically highlighted at the new location. Single-salary families were often required to change to being two-salary families in order to meet increased expenses. Loss of a secondary source of income stemming from part-time or seasonal employment available at the original location but not available at the new location was documented in the relocation studies. That loss further added to a reduced economic position.

Changes in level of taxation were also mentioned in the literature and by some of those interviewed. Moves from one farm to another, to an acreage, or to an urban area resulted in increases in the amount of taxes the family paid for their land (in one situation in Keephills, taxes more than doubled).

Sometimes, relocation resulted in families being settled on smaller and poorer farms; market value prices paid for their farms were lower than actual replacement value and resulted in the vendor's inability to obtain similar or improved farms. New farms were also further from service centers in some situations so that the new owners had increased travelling distances to obtain services, shop and socialize. Lifestyle changes (especially with a move from a rural to an urban area) were created, and greater expectations developed for housing, clothing, recreation, and other aspects of family life.

In general, findings from this study indicated that seldom, if ever, were the actual costs of displacement-relocation fully covered by the compensation which was received. Costs of relocation which were usually covered through compensation from the relocating agency were market value for the farm, including some costs for improvements to the land, and simple moving costs. Simple moving costs included gas, meals, lodging and, in some cases, legal and real estate fees. In the interviews, a number of the families mentioned that they did not document their costs and did not, therefore, receive compensation for them.

Most of the costs which were less easily identified and quantified were not compensated for. Those costs included costs for locating a new home, moving to that location (usually moving was done with the help of neighbours and friends - their time was never paid for), refurbishing the new home, loss of income-in-kind from the old residence (e.g. garden), and an increased cost of living at the new location.

Some families were found to be typically impacted to a greater degree than others by the displacement-relocation experience; larger families, elders, landowners (vs. renters), and long-time residents (often with the least debt) were usually hurt the most by their experience. As a result, families who could least afford it were often those affected most negatively. Those who were the least negatively affected were typically more highly educated, had a higher socioeconomic status and either had or acquired the expertise necessary to assure that their interests were fully protected.

From analysis of both the studies on displacement and relocation,

and the information gathered through the Keephills interviews, it appears that the problems which have arisen in determining and compensating for the financial and economic costs of displacement-relocation, have developed because of the way in which the costs of displacement-relocation have been assessed, negotiated and mitigated. Typically, displaced landowners and project developers have initially attempted to reach a mutually agreeable settlement (most settlements have been reached in that way). Only if no agreement was possible did the two parties turn to a third (in Alberta, the Surface Rights Board) for adjudication.

The interests, knowledge and capabilities of the developer and the landowner were brought into play during the initial phase. In most instances, a vast disparity existed between the two. The developer was represented by a landman highly experienced in land buying, who approached the displacement from the perspective of a land acquisition and a business deal. The intent of his actions was primarily to obtain the land for the least possible cost. Because of that orientation, the landman had a vested interest in ignoring or downplaying costs to the landowner associated with the displacement and relocation.

The landowner, on the other hand, was typically ill-equipped to negotiate for his costs. Many had not been in the land buying or selling market for years and were unaware of what asking prices were. Those who had had experience in dealing with large companies were few, if any. Few also had had experience in working with lawyers and land appraisers before their displacement. Because there were varying degrees of skills, knowledge and experiences amongst those who were displaced, though, some landowners were better able to obtain

compensation for their costs in relocating. In addition, none of those who were displaced understood or anticipated the actual costs which were associated with relocating.

The implications of those finding of this study are four fold. There is a immediate need for a better undertaking of the actual costs associated with the displacement-relocation process decision, moving and resettlement expenses. That understanding would provide better direction in determining both areas where compensation should be considered, and appropriate levels of compensation. Second, a different approach to the determination of compensation is required; one which would recognize the need to fully cover the actual costs, plus provide some benefit to the landowner (at present, it appears that that outcome is already happening with those families who hire outside experts - only those families who because of psychological or economical characteristics do not hire assistance are placed outside of that procedure). That principle would replace the least cost concept now being employed by many companies.

Third, some system which would encourage a fairer and more consistent approach to the determination of compensation in situations where the two parties involved (landowner and developer) were not formally appearing before the surface Rights Board is necessary to satisfy community concerns about unfair and inconsistent settlements. Lastly, there is a need for some mechanism or body to provide information and assistance to farmers and landowners in determining their legal rights. Again, since those families who would need that service the most would typically be those least likely to directly obtain legal council, some form of outreach approach would be necessary

to counter act the shyness and non-aggressive nature of those families.

Physical health

Initially, in this thesis, the displacement-relocation experience was thought to have the potential to create impacts on the physical health of individuals who were displaced. The review of literature on relocation documented some indication that impacts on physical health did, in fact, occur. For the most part, the impacts which were mentioned related to one of two types of effects: stress-related illness, and effects on physical health resulting from a change in physical environment or work.

Those effects which were documented included both moving into less safe environments (environments with a higher crime rate, more traffic, or a larger possibility of mortality or morbidity), and moving away from higher-risk areas and into areas with easier access to medical services. Elderly people, because they were generally more vulnerable to illness and stress-related illness, appeared to be particularly affected. The Keephills interviews did indicate the presence of stress-related illnesses associated with the displacement-relocation experience - those illnesses were not major, however. As well, some families commented that the move brought them into both safer (away from heavy traffic) environments and into environments with greater potential for physical harm (from higher levels of crime).

As a result of those findings, in designing and carrying out relocation programs, it would, as part of the assistance provided to families, be important, it appears, to identify any individuals who

appeared to be particularly vulnerable or sensitive to stress related to the experience. Counselling and assistance provided to counteract the associated stress would help reduce related physical health effects. Particular efforts would need to be directed toward preparing elderly individuals and vulnerable families for relocation, and ensuring that their specific needs were dealt with in the relocating program.

Psychological-mental well-being

The impacts on psychological and mental well-being felt by individuals who experienced displacement-relocation were thought initially to be related to either the manner in which the process and approach were perceived (e.g. as a threat), or to the degree to which the disruption occurred in the gratification of those psychological needs which were being met at the original location (for example, security and personal sense of belonging). Findings from the Keephills interviews and from the review of previous studies, however, indicated that psychological-mental well-being impacts resulted from four factors: a sense of personal loss (for example, a social status, a role, a home, or friends), the perception of being placed in a psychologically insecure position, the perception of being threatened, and the perception of being isolated or being placed in a new social environment. Each of those four perceptions appeared to result in a number of expressed effects on psychological mental well-being. A sense of loss was expressed in specific reactions of grief, sadness, despondency, and irritability. Perceptions of being placed in a psychologically insecure position resulted in expressions of

insecurity, inadequacy, ambivalence, and confusion, along with an inability to make decisions, and a lack of personal direction in daily life. Perception of the displacement and relocation as a threat (implying a belief that relocates would lose as a result of the experience) resulted in feelings of persecution, anger and hostility. For some individuals, who moved away from friends, and experienced a fracturing of social contacts, the displacement-relocation experience created feelings of alienation and isolation.

In general, because of the changes implicit in the displacement-relocation experience, and the requirements for individual decision and action, the most typical and prevalent effect was an increase in the level of stress in the lives of the people experiencing displacement-relocation. That stress, in turn, created additional psychological and physiological effects.

Three factors relating to specific individuals appeared to act in such a way as to modify both the level and significance of the psychological-mental well-being impacts resulting from displacement-relocation: the level of personal commitment to and identification with the original location, the personal experiences and capabilities of the individual, and the attitude towards the displacement-relocation experience. Where the individual was a long-term resident, had a high level of commitment and identity with the original residence and community, had little experience outside of the community and was relatively unworldly in his experiences, and had a negative attitude towards relocation, the level of impact was the greatest. For those individuals who had little commitment, had lived outside of the community and had a high capability of successfully adapting to a new

environment, and had a positive attitude towards the relocation, the level of impact was the least.

On the whole, it would appear that the best approach to dealing with impacts from displacement-relocation in the psychological area would be to attempt to either prevent their formation, or eliminate their effect. The findings from this study indicate that impacts in those areas are highly individualistic, serious, and can be particularly debilitating. Those findings would imply that any program to deal with this area of effects would need, therefore, to take a highly individualistic and sensitive approach. Families would need to be assessed to find out their special characteristics and needs. Psychological preparation and support would be required throughout the displacement-relocation process in order to maximize post-relocation adjustment, particularly for elderly people and vulnerable families. Relocation staff would need to be trained in this area and be sensitive to the needs of the individuals and families in order to obtain the level of trust necessary to assist them in dealing with problems, and in encouraging the development of individual capabilities to resolve difficulties. Follow-up, particularly for vulnerable families, would be essential.

Social Life

Initial conceptualizations of the potential impacts of displacement-relocation on social life were focused upon the effects on individuals. Communities in which individuals resided were thought to provide a wide variety of functions, including assistance in the formation and maintenance of an individual's personal identity;

satisfaction of his needs for belonging and love; status recognition, self-esteem, social participation, and socialization; and, in general, provision of a framework for mutual support in dealing with problems or events which arose throughout each person's life.

The degree of impact and its significance were believed to be greater in those areas where most of those functions were provided in the original community. If the individual was required to relocate to another community, he would have to commute back, forego the support provided through old ties, or redevelop relationships which would again provide those functions. Of particular importance was the location of an individual's reference group - that group which often satisfied the bulk of an individual's social needs. Relocating away from those groups, and not being able to maintain those relationships, resulted in the loss of an important source of need satisfaction.

In the review of previous studies, the displacement-relocation process was found to be a two-sided process. Not only were individuals required to adapt to the displacement-relocation experience; host communities were required to cope with and adapt to the loss of members in some instances, and to cope with the addition of new members in other instances.

For the individuals who were displaced, findings from the review of studies indicated that they experienced changes in social status, roles and functions, social interaction and participation, social bonds and friendships, and social support. As was thought initially, the degree and significance of the impact was found to be directly related to the commitment of the individual to the community and the degree to which his social needs were satisfied by the community, and inversely

related to the needs which were satisfied outside of the original community.

In both the literature and through the Keephills interviews, changes occurred in communities where members were lost due to displacement because those individuals and families who left had previously been part of the social system of the community. As a result, voids were left which either remained or were later filled by other members (when possible). The social support system of neighbour helping neighbour in times of need was disrupted when members who both gave and received assistance and support were displaced. The cohesiveness of the community was also affected in two ways. When a project was proposed and families were displaced, those members who remained (provided that there were still enough left) drew closer together and identified more strongly than ever with their communities. The project acted as a threat and created greater cohesion within the community. In some cases, however, those who remained were few and were inundated by newcomers; that situation resulted in increased alienation amongst those who remained and contributed to a diminished sense of community and cohesiveness.

Communities which received new members as a result of families being displaced were required to assist those families in integration into their social system. In most instances, in the literature, and particularly with Keephills, there was no planned or conscious program of integration; rather, the normal processes occurred in which neighbours were met, relationships developed and families fitted into existing social patterns. In the Keephills experience, those families who had recently moved had begun that process; however, there was

little sense of identity or commitment to their new community.

Some families, by their very nature, were more worldly, had a greater flexibility in where they chose to live, and had fewer dependencies upon their communities than did others. For those families, the degree of impact appeared to be less and they were better able to cope with the effects. With the Keephills development, the families who were nonresident, and had a history of mobility, appeared to be less distressed at the thought of moving and were better able to complete a relocation.

In general, the findings of this study on social impacts of displacement-relocation indicate the particularity of effects for individual families and their social situations. Some families are able to cope and adapt to the experience without assistance; others are unable to successfully achieve an adequate level of post-relocation adjustment without some assistance from outside. Communities also vary in their organizational capabilities and abilities to adapt to either an increase or a decrease in population. Some are composed of members who are able and do organize to smoothly accept new members, or give up old members. Others are less able.

As with psychological-mental well-being impacts, compensation for social impacts is difficult to provide. While resources (for example, money and manpower) may help to divert attention from the impacts, or provide a substitute for the loss of the social item which was impacted, the best approach would appear to be to attempt to prevent impacts where possible. Where that is not possible, organizational assistance could help in restructuring and reorganizing community and family life to alleviate the impacts by overcoming problems which

develop.

For families who are displaced, assistance in coping with the social requirements of moving from one community into another is essential if successful relocation is to be achieved. Assistance in entering the new community, introduction to the services at the new community and counselling to cope with and adapt to changes in family and community roles, statuses and relationships would be of large benefit.

Communities who lose or gain substantial numbers of members would benefit from organizational assistance to smooth the integration of the new members, to reorganize to fill the void left by members who were displaced, and to help the community change and adapt in order to survive. The enhancement of community identity and member commitment should necessarily be a high priority of that assistance.

Recommendations

This thesis has examined the process of displacement-relocation, identifying and analyzing deficiencies and problem areas, in order to provide suggestions for improving the system presently operating in Alberta. The recommendations developed as part of this thesis are presented below:

1. Site selection procedure: The findings from this study indicate that much of the negative reaction to development occurs as a result of community perceptions that the project would create overall negative effects for its members. At present, a proponent is placed in the situation of having to sell the concept that his power project will

result in overall positive effects to a highly skeptical public. Given the variety of options available for power generation in Alberta (coal fired and nuclear options), one innovative approach would be for the Provincial Government to initiate a request for proposal procedure for site selection. Communities who were interested could develop proposals for projects in their area. In that way companies and the government would be placed in the position of being able to choose an option where communities had already determined that the benefits of a project out-weighed the costs. Under that procedure, any negative impact would then be perceived by the community, in general, an obstacle to overcome, rather than a reason to oppose the development. In that way, communities would also be required to deal with the conflicting views of its members rather than having the proponent or government adjudicate in that area. That procedure would also allow communities to develop conditions for their acceptance of a project, and the three parties (developers, community and government) would be in the position of negotiating for the best deal from each of their perspectives.

2. Alberta Electrical Generation Development Committee

The above request for proposal procedure should be implemented through an agency which had as its central responsibility the timely and efficient development of the electrical generating capacity required for the Province. That agency, building on the concept of the Alberta Electric Utility Planning Council, but modelled after the Brown Coal Committee in Germany, would have representatives from the electric power producers, government agencies, major power consumers, and

representatives from the general public, including members from communities surrounding the potential coal fired power development sites.

3. Displacement-relocation philosophy

A change in the overall philosophy embodied within the existing displacement-relocation process is essential to the future development of resources in Alberta. Rather than utilizing a least cost approach to the acquisition of land and relocation of families, developers should adopt a philosophy which promotes a positive perception of the process by families who are displaced. That would be accomplished through ensuring that benefits accruing to them as a result of the displacement-relocation process outweighed the costs. The guiding philosophy should be to ensure that families are left in an overall life situation which was better than or equal to their pre-displacement situation. In order for that to occur, enabling legislation might be required (for example changes to the Public Utilities Act which would allow those changes to be considered as falling under the least cost for electrical power provision). Changes in company policies and employee reward systems would also be essential in the adoption of that philosophy.

4. The Alberta Surface Rights Board

Changes in the role and responsibilities of the Alberta Surface Rights Board would assist in the development of an improved displacement-relocation process. The Board, for all land negotiations required for electric power plant developments and subject to the

provisions of either the Surface Rights Act or the Expropriation Act, should review final settlements to ensure their equity, fairness, and consistency.

Their involvement in the process should be two fold: adjudication in areas of disagreement (as they presently do) as well as providing advice in other situations. In cases where their review of a land sale indicates inequity, the Board should have the ability to order a revised settlement. Either as part of the Surface Rights Board, or through some other mechanism, an outreach program should also be developed to provide less aggressive land owners with information and assistance on their legal rights.

5. A more comprehensive approach to displacement-relocation processes

A more comprehensive approach to displacement relocation, designed to fully identify and address the actual impacts of the process is necessary for Alberta. The following specific recommendations relate to details of a revised procedure which would more adequately achieve that objective.

a) Initial stages of the project

i) Developing a working relationship. Early in the project planning phase developers should initiate a coordinated and integrated approach to community involvements which would have, as its goal, the establishment of a working relationship between the company and its various departments and the community.

ii) Definition of project need. In order to achieve public acceptance of the need for a project, proponents should provide

information, in an assimilatable and credible form, on the demand/supply picture and on the benefits and drawbacks in not developing the resource.

iii) Rationalization of the specific project. Once having achieved public acceptance of the need for a project, the proponent should justify the specific project being proposed by publicly reviewing possible alternatives, reviewing the evaluation process involved in selecting the particular project and the specific site, and demonstrating that appropriate criteria were used (i.e., the social, cultural, local/regional, economic, and environmental aspects were dealt with as well as the traditional technical and project economic factors).

iv) Notice of impact. Those communities which are likely to be negatively affected by the displacement of some or all of their members should be notified through a formal and written process of a proposed development and its possible effects. Information on the development should outline the extent and area of effect, and provide an approximation (at a minimum) of the timing of the proposed project and resulting displacement.

v) Opportunities for dialogue. Along with the written and formal information, opportunities for the discussion of the possible effects should be provided by the developer for community residents. While a formal meeting may play a role in that process, smaller, informal discussions with families and groups of neighbours and friends should be used to ensure the adequate communication of that information.

vi) Information to families to be displaced. Those families for

whom displacement is being proposed should receive specific information on the degree of effect, whether or not they are to be displaced, and if so, what the timing will be. Written communication should be used to ensure that they receive and are able to contemplate accurate data on the proposed effects.

vii) Assistance in reaching a decision. Families who are to be directly affected should receive individual attention and counselling on their legal rights, and the implications of the proposal upon themselves and their members; that assistance should be provided by a third party to the development - either a government agency or a community-based organization.

b) Purchase of property

i) Commencement of land purchase. Except for families who approach the developer for the sale of their land, land purchase activities should await major government approval of the project (order in council).

ii) Assuring the certainty of land requirements. Prior to informing families of their displacement, developers should ensure that the project description has evolved to the state where land requirements are firm, and the displacement is known to be actually required.

iii) Assistance to landowners in arriving at compensation settlements. Legal, financial and technical assistance and counselling should be made available to landowners in areas where displacements are being proposed to ensure that landowners are fully aware of their legal rights, of the value of their land and improvements, and of the costs

associated with finding, moving to, and reestablishing themselves in a new location.

iv) Approach to compensation.

● Compensation, both financial and non-financial, should be used to mitigate negative impacts of developments where possible.

● Financial compensation should cover replacement value for land, home and any improvements; complete costs of moving; expenses incurred in defending their interests; reestablishment expenses including business and farm losses resulting from relocation; financial support during occupational transition; costs for any occupations or skill training or upgrading, and replacement for lost income.

● Non-financial compensation should include assistance in locating a new residence and business, arranging for purchase (title searches, legal procedures, appraisals), arranging and carrying out the actual move, and loan guarantees if required to assist in reestablishment in the new community. Other non-financial compensation measures are discussed in the following sections relating to social and psychological counselling.

c) Facilitating the Move

i) Displacement-relocation assistance.

● A unified approach to the provision of displacement-relocation assistance services should be provided through one agency who would bear the specific responsibility of ensuring that the necessary services are provided through whatever arrangements are required (use of existing programs or development of new one).

● An initial interview with each family should be undertaken to

assess their needs, and to design specific measures to meet those needs (including emotional, legal, financial, occupational, and business counselling).

●In preparing for the move, assistance should be offered in organizing for a move, disposing of any unnecessary assets and organizing the logistics of the move (for example, who was to do the moving, when, how was payment to be provided).

●Funds for relocation should be provided in much the same manner as organizations provide expense accounts for their members and employees.

●Detailed accounting for the expenditure of those advanced funds should then be required to justify the expenditures, and repayments or the provision of further funds would follow the filing and approval of the expense account forms.

●A displacement-relocation program should provide assistance with the location of a new residence and business, the provision of appraisals, selection of appropriate options, as well as the traditional tasks of packing, arranging for utilities and services at the new location, location of banking services, moving, unpacking, and refurbishing the new home to the tastes of the family.

●Where employment is lost, assistance in locating new employment, upgrading skills or retraining should be provided as part of the compensation package to ensure that the previous level of income is maintained or increased. Where a new business or farming operation is established, business management, extension, financial, accounting and legal assistance should be provided.

●Resettlement assistance should include introductions to the

new community and its institutions, occupation and employment location counselling, retraining if required and counselling to assist the family in dealing with any problems which arise. Any life skills deficiencies should also be addressed and rectified.

ii) Timing of displacement and relocation

- A minimum of one year should be provided to families to enable them to choose a new residence and land, and dispose of all unnecessary assets (cattle, machinery, buildings, agricultural products).

- Timing of notice should be cognizant of the seasonal nature of farming, and the impact of weather on relocation plans. No relocation should be carried out during the winter months.

iii) Relocation personnel

- Personnel providing services as part of a displacement-relocation program should include lawyers, appraisers, occupational and employment counsellors, business counsellors, financial consultants, accountants, agricultural extension staff, home economists, community development specialists, social workers with counselling capabilities, and relocation specialists familiar with the process (who could work with families on a one-on-one basis and provide continuity throughout the process).

- The service of the various specialists and generalists should be coordinated through the one agency coordinating the relocation program.

iv) Role of the community

- Community involvement should also be provided in the actual planning of a project, and the design of a displacement-relocation

program particularly in the identification, evaluation, and assessment of impacts and in the identification of areas where opportunities existed for the project to create or enhance benefits to the affected community.

- Organizational assistance should be provided to communities who are going to receive or lose members in order to ease both the loss and the gain.

v) Adjudication of disagreements.

- A mechanism should be designed to adjudicate in areas of disagreement between the developer and affected individuals and communities, for each project, for areas over and above surface rights.

- That adjudicating body should be empowered to sanction non-compliance of its decisions.

- Representation on that body should include members of the affected community.

d) Follow-up

- i) A program designed to assist families to relocate to a new residence or community should provide follow-up to the families after the move has occurred to ensure that unintended consequences of the displacement-relocation are mitigated.

- ii) Follow-up assistance should be geared to the needs of the family, oriented towards enabling them to achieve a satisfactory level of post-relocation adjustment, and involve those personnel required to address the particular needs of the family.

- iii) At some appropriate length of time after the family has

resettled in their new residence, the level of financial compensation which was received should be evaluated in comparison to the actual costs involved in the relocation. Where additional and reasonable expenditures exceeded the original settlement, the family should be reimbursed for the extra costs.

6. A displacement-relocation task force

a) Provincial task force. A provincial task force should be formed to ensure the orderly, equitable and fair relocation of families displaced by future energy and like developments. That agency would report to or work in close coordination with the existing Surface Rights Board and the recommended Alberta Electrical Generation Development Committee. The task force should be composed of the members of a relocation team drawn from a variety of professions and agencies fully able to address the multifold effects of relocation through that expertise.

b) Program design. In any situation where the displacement-relocation of families was required, the task force would be deployed to ensure an adequate and appropriate program was designed and implemented. Where such a program had not already been designed and implemented, the task force should have the option of assisting in the formation of such a program, or undertaking the program itself.

c) Funding. Funding for the task force should be provided through the Provincial Government. Where programs were designed and

implemented for developers, however, those developers should be invoiced and asked to cover the costs associated with the relocation of families affected by their projects.

CHAPTER VII

CONCLUSIONS

Reflections

Over the past eight years, the author has had the opportunity of working directly with a number of families from a variety of communities affected by resource developments. In that time, he has re-discovered, re-affirmed and applied a number of basic principles and concepts relating to people, their communities and their behaviours. Those concepts, most of which are subconsciously learned or displayed by children even before they are able to talk, however, appear to be often forgotten when adults relate to other adults. Perhaps our education and upbringing have blinded us to the fundamental nature of those principles or have left us unable to recognize the simplicity of the patterns. Possibly our concepts of the world and how it works are so egocentric that we are incapable or unwilling to admit that others have the same needs as we do. Or maybe, because the interests of others appear to be at odds with those of ourselves, we discount and oppose them rather than seek a mutually agreeable and satisfactory compromise. Whatever the reason (and likely all of the above scenarios hold true at least part of the time), many of the problems which have resulted from displacement-relocation experiences appear to the author to have developed because a few basic principles have been ignored.

Firstly, people act in what they believe to be their own self-interest in an internally rational manner unless they are mentally

ill or are dealing with a situation where something or somebody that they hold more dearly than they do themselves is threatened. The key here is that the decision of whether or not self-interest is being promoted is internal to the individual. He alone decides, through his own values what is important to him, and how those things he values are being affected. With that in mind, it would seem logical to expect that families or individuals would oppose anything which they perceived would diminish their self-interest. It should not be surprising, then, that families oppose developments which they believe will affect them in a significant and negative way. Conversely, it should be expected that people would support those changes which they perceive would enhance their self-interest.

In every development the author has worked on, the same general phenomena has occurred. The community has split into three major groups: those who perceive that they will be negatively affected in a significant way, and therefore oppose the development (or some aspect of it); those who believe that their interests will be significantly enhanced and are adamant in their support (often farmers wishing to retire and businessman from surrounding communities); and lastly the majority of families who either lack sufficient information to decide how they will be effected, or do not believe that they will be significantly affected one way or the other.

For reducing opposition towards, and enhancing support for a development, the principle is simple: promote the greatest number of benefits (particularly those which would be perceived as such by impacted families) and the least number of disbenefits for the affected communities and their members. That presupposes, however, that a

developer has taken the time and the effort to find out what those people truly believe are benefits and disbenefits.

Secondly, ownership enhances commitment. Providing opportunities for communities and families to gain a sense of ownership in a development, a process or an event, in the experience of the author, greatly enhances understanding, commitment and support. Relating that to displacement-relocation, providing opportunities for communities to become involved in a significant and meaningful manner (again, from their perspective) in the planning, design and implication of a project, and a displacement-relocation process enhances the likelihood of a positive reaction from the surrounding community. That presumes, though, that developers are willing to broaden the objectives of the development or program to include those of the community (for example, local employment, purchasing of goods and services and environmental protection).

Thirdly, people and communities are normally fearful and distrustful of strangers whose motives they are unsure of. That is particularly true in these times when large organizations, both industry and government, are looked upon with great distrust. Gaining trust and overcoming fear, for a developer, are essential to the development of a smooth working relationship between themselves and communities. The benefit of that type of an arrangement lies in the willingness of the community to provide the benefit of the doubt to the developer when the inevitable (given the human affinity for making errors) wrong occurs. Rather than automatically presuming that the mistake was intentional, and that all of their negative suspicions towards the developer were true, that relationship between the

Community and the developer would provide the opportunity for the developer to explain what happened, and to be judged in fairness by the community, according to the actual events which occurred. A relationship of that type, however requires that a developer firmly commit themselves to taking enough time for their staff to get to know the community (better yet, hire locally), and for the community to be able to reach the conclusion that the company, through its long term behaviour, is sensitive to their needs, and is willing to assist the community to achieve some of their objectives in the course of meeting those of the corporation.

The findings of this research appear to support those principles. corporate recognition and action based upon those principles would go a long way in creating a more humane displacement- relocation process.

Areas for Future Research

While a great deal of literature has been generated in the area of displacement relocation and related effects, most of the studies have used cross sectional survey designs. That technique misses the detail of the experiences families have throughout their process.

One particular area where additional work could be carried out is in the area of economic costs. While this study has been able to discern that many expenses have not been covered in past experiences, details of amounts and areas where costs were incurred would be of great assistance in calculating realistic compensation. In addition, in this study, the findings on displacement-relocation related effects to physical health were inconclusive. While some studies indicated significant effects, particularly for elderly people, most studies did

not address that issue in detail.

In both the social and psychological areas, individual subjective perceptions are very important in determining the type, level, and significance of impact. For other areas, notably economic and physical health effects, however, objective measurements of impact would be of particular assistance in defining and designing measures to ameliorate impacts. For that reason more detailed work in the form of longitudinal case studies of individual families would help to better illuminate areas where costs, and effects to health occur.

Conclusions

The main goal of this thesis was to achieve a better understanding of the displacement-relocation process, its components and resulting impacts, in the hopes that that understanding would lead to recommendations for a more appropriate process for accomplishing the future relocation of families displaced by resource developments. That goal was accomplished by conceptualizing the process, then gathering information both from previous research and from interviews with families from the Keepphills-Highvale community, and by analyzing and interpreting the data. The degree to which this research aids in the improvement of the present displacement-relocation process will depend upon the degree to which the information contained herein, and the recommendations set forth, are utilized.

BIBLIOGRAPHY

Agriculture in Alberta and Canada: History and Characteristics

Alberta Agriculture. A Historical Series of Agricultural Statistics*
Alberta, (Supplement). Edmonton: 1974.

Alberta Agriculture. A History in Graphs. Edmonton, 1972.

Bollman, Ray. "Unpublished Information on Farm Operator Entrants and Exits". Ottawa: Agriculture Statistics Division, Statistics Canada, 1980.

Exner, M. "Internal Migration in Alberta: 1956-1971". [Unpublished B.A. Honours Paper, University of Alberta, Sociology Department], Edmonton, 1975.

Lamb, Richard F. "Intra-Regional Migration Patterns in Rural United States; 1950-75". Canadian Studies in Population. Edmonton University of Alberta Population Research Lab, Volume 5, 1978.

Lamont, G.R. and V.B. Proudfoot. "Migration and Changing Settlement Patterns in Alberta". People on the Move: Studies on Internal Migration, [L.A. Kosinski and R.M. Drothero (eds.)]. Edmonton: Methican & Co. Ltd., 1975.

McGinnis, D. "Farm Labour in Transition: Occupational Structure and Economic Dependency in Alberta, 1921-1951". The Settlement of the West, [Howard Palmer (ed.)]. Calgary: University of Calgary Press, 1977.

Paranteau, R. Is Canada Going Back to the Land? [Statistics Canada Working Paper], Ottawa, March, 1980.

Shaw, Paul. Canada's Farm Population. Ottawa: Statistics Canada, 1979.

Steeves, A.D., "Mobility Into and Out of Canadian Agriculture". Rural Sociology, [44(3)]. 1979.

Whyte, D.R. "Rural Canada in Transition. Rural Canada in Transition: A Multi-Dimensional Study of the Impact of Technology and Urbanization on Traditional Society, [Tremblay and Anderson (eds.)]. Ottawa: Agricultural Economics Research Council of Canada, 1966.

Wood, V.A., Davis, J.E. and Brown, R.W. Land Use Forum: Report and Recommendations. Edmonton: Government of Alberta: January, 1976.

Zimmerman, C.C. and Moneo, G.W. The Prairie Community System. Agricultural Economics Research Council of Canada, June, 1970.

Energy Development and
Futures: Alberta and General

Alberta Report. The Return of King Coal. January 30, 1981.

Calgary Power Ltd. and Can Pac Minerals Ltd. Application to the Energy Resources Conservation Board to Develop Roundhill Mine and Dodds Thermal Plant, [Section 5, Vol. 5]. Calgary: 1975.

Calgary Power Ltd. South Sundance Thermal Power Project, Environmental Impact Assessment Overview Report. Calgary: October, 1976.

Calgary Power Ltd. Application to the Energy Resources Conservation Board for Approval to Construct, Connect and Operate Units 3 and 4 at the Keephills Thermal Station, [Vol. 1-3]. Calgary: October, 1979.

Calgary Power Ltd. Amendment to Application to the Energy Resources Conservation Board for Approval to Construct, Connect and Operate Units 3 and 4 at the Keephills Thermal Station, [Vol. 1-5]. Calgary: March, 1981.

Committee on Keephills Environment. A Brief Prepared for the Select Committee on Surface Rights. Keephills, Alberta, December, 1980.

Electric Utility Planning Council. Electric Utility Planning Council News, [5(2)]. Calgary: October, 1977.

Electric Utility Planning Council. EUPC Submission to the Energy Resources Conservation Board Respecting CPL's Applications No. 780363 and 780589. Calgary: January 16, 1979.

Electric Utility Planning Council. Power Generation in Alberta (1981-2005). Edmonton: March 12, 1981.

Energy Resources Conservation Board. Review of Alberta Coal Industry: 1973. Calgary: March, 1974.

Energy Resources Conservation Board. Energy Requirements in Alberta: 1977-2006. Calgary: September, 1978.

Energy Resources Conservation Board. Alberta's Energy Resources: A Summary. Calgary: December 31, 1978.

Energy Resources Conservation Board. Reserves of Coal: Province of Alberta. Calgary: December 31, 1978.

Ezra, D. Coal and Energy. New York: John Wiley & Sons, 1978.

Government of Alberta. A Coal Development Policy for Alberta. June 15, 1976.

Hopkins, T. "Coal's Big Comeback". Macleans, [93(28)]. July 14, 1980.

Lovins, A.B. Soft Energy Paths. New York: Harper and Row, 1977.

Millard, V. Canada's Energy Resources and Their Availability for Electric Energy Conversion. [Address presented in connection with a short course entitled "Electric Power Generation - Rationale of Utility Planning Processes Explained"]. University of Ottawa, May 26, 1980.

Piggott, T. "Coal Takes Center Stage". Alberta Motorist. March-April, 1980.

"Scarce Oil and Plentiful Gas - A Canadian Challenge". Scotiabank Monthly Review. January-February, 1980.

The Sibbald Group, [A Division of Haskins and Sells Associates]. A Study of Compensation. Alberta, February, 1979.

United Nations Economic Commission for Europe. Coal: 1985 and Beyond. Pergaman Press, Oxford, 1978.

Perspectives of Displacement-Relocation

Borrie, W.D. The Cultural Integration of Immigrants. UNESCO, 1956.

Brown, George W. and Tirril Harris. Social Origins of Depression. London: Tavistock Publications Ltd., 1978.

Clarke, John I. Population Geography, [Second Edition]. Pergaman Press, Oxford, 1976.

Cottrell, W.F. "Death by Dieselization: A Case Study in the Reaction to Technological Change". American Sociological Review, [16(3)]. June, 1951.

Eisenstadt, S.N. The Absorption of Immigrants. London: Routledge & Kegan Paul Ltd., 1954.

Goulet, Denis. The Cruel Choice. New York: Atheneum, 1971.

Hollander, E.P. and Raymond G. Hunt (eds.). Current Perspectives in Social Psychology. New York: Oxford University Press, 1963.

Jansen, Clifford J. (ed.). Readings in the Sociology of Migration. New York: Pergaman Press, 1970.

Kosinski, Leszek A. and R. Mansell Prothero (eds.). People on the Move: Studies on Internal Migration. London: Methuen & Co., 1975.

- Lauer, Robert H. Perspectives on Social Change, [Second Edition]. Boston: Allyn & Bacon Inc., May, 1978.
- Levine, Sol and Norman A. Scotch. Social Stress. Chicago: Aldine Publishing, 1970.
- Loomis, Charles P. Social Systems: Essays on Their Persistence and Change. Princeton: D. Van Nostrand & Co., 1960.
- Loomis, Charles P. and J. Allen Beegle. Rural Social Systems. New York: Prentice Hall, 1950.
- Michelman, F.I. "Property, Utility and Fairness: Comments on the Ethical Foundations of 'Just Compensation' Law". Harvard Law Review, [80(6)]. April, 1967.
- Mottershead, C.J.S. An Exploratory Study of Adjustment of Migrants to Their New Environment: An Application of Role Theory Supplemented By Stress Theory, [Unpublished M.A. Thesis, Sociology]. University of Alberta, Fall, 1978.
- Parker, J.M. Oral History of the Athabasca Oil Sands Region. Edmonton: Boreal Institute for Northern Studies, University of Alberta, September, 1979.
- Penner, Louis A. Social Psychology. New York: Oxford University Press, 1978.
- Poplin, D.E. Communities: A Survey of Theories and Methods of Research. New York: MacMillan, 1972.
- Rogers, E.M. and R.J. Burdige. Social Change in Rural Societies. New Jersey: Prentice Hall, 1972.
- Rogers, Everett M. and F. Floyd Shoemaker. Communication of Innovation. New York: Free Press, 1971.
- Rowland, D.T. "Evaluating the Functions of Internal Migration in Settlement Systems". Canadian Studies in Population [5]. Edmonton: Population Research Laboratory, University of Alberta, 1978.
- Sanders, I.T. The Community: An Introduction to a Social System. New York: Ronald Press, 1966.
- Schwarzweiler, H.K. and J.S. Brown. "Social Class Origins, Rural-Urban Migration and Economic Life Chances: A Case Study". Rural Sociology, [32]. March, 1967.
- Selye, Hans. Stress Without Distress. Philadelphia: J.B. Lippincott, 1974.
- Service, E.R. Primitive Social Organization. New York: Random House, 1971.

Toby, Jackson (ed.). Talcott Parsons: The Evolution of Societies. New Jersey: Prentice Hall, 1977.

Warren, R.L. The Community in America. Chicago: Rand McNally College Publishing Company, 1978.

Bibliographies

Cook, E. Bibliography on Relocation of Families as a Result of Government Acquisition of Property. [Council of Planning Librarians Exchange Bibliography, #744]. Arlington: February, 1975.

Cortese, C.F. The Social Effects of Energy Boomtowns in the West: A Partially Annotated Bibliography. [Council of Planning Librarians Exchange Bibliography, #1157]. Denver: June, 1978.

Donnermeyer, J.F. Forced Migration: A Bibliography on the Sociology of Population Displacement and Resettlement. [Council of Planning Librarians Exchange Bibliography, #880]. Kentucky: September, 1975.

Glickfield, M., T. Whitney and J.E. Grigsby, III. A Selective Analytical Bibliography for Social Impact Assessment. [Council of Planning Librarians Exchange Bibliography, #1562]. Stanford: July, 1978.

Kale, S. The Impact of New or Additional Industry Upon Rurally Oriented Areas: A Selectively Annotated Bibliography With Emphasis on Manufacturing. [Council of Planning Librarians Exchange Bibliography, #1148]. Nebraska: October, 1976.

Past Relocation Experiences

Abramson, J.A. A Study of the Effects of Displacement on Farmers Whose Land Was Purchased For Two Community Pastures in Saskatchewan. University of Saskatchewan, December, 1965.

Abramson, J.A. Rural to Urban Adjustment, [ARDA Research Project]. Ottawa: Ministry of Forestry and Rural Development, 1968.

Adkins, W.G. and F.F. Eichman, Jr. Consequences of Displacement by Right of Way to 100 Home Owners: Dallas, Texas. Texas: Texas Transportation Institute, A&M College, September, 1961.

Belyea, A.F. Personal communications. Edmonton: 1980.

Bertrand, A.L. and H.W. Osborne. "The Impact of Industrialization on a Rural Community". The Journal of Farm Economics. December, 1959.

"The Big Hole". Der Spiegel, [Translated by A. Seifried]. May 30, 1977.

- Blakely, R. Opportunity for Progress: A Special Relocation Policy for Gros Morne National Park. Quebec: Parks Canada, 1973.
- Booth, A. and H. Camp. "Housing Relocation and Family Integration Patterns". Journal of American Institute of Planners, [40(2)]. 1974.
- Buckley, Helen and Eva Tihanyi. Canadian Policies for Rural Adjustment. Ottawa: Economic Council of Canada, Special Study No. 7, 1967.
- Bultena, G.L. "Public Attitudes Towards Coal Strip Mining in Iowa". Journal of Soil and Water Conservation, [34(3)]. 1979.
- Burdge, R.V. "A Summary of Sociological Studies of Water Resources Dealing With Social Goals and the Quality of Life: The Strawman and Other Studies". The Social Well-Being and Quality of Life Dimension in Water Resources Planning and Development, [Proceedings of the Conference of the University Council on Water Resources]. Wade Andrews et al (ed.). Logan: Utah State University, July 10-12, 1973.
- Burdge, R.J. and K.S. Johnson. Social Costs and Benefits of Water Resource Construction. Lexington: University of Kentucky, November, 1973.
- Burdge, R.J. and R.L. Ludtke. Factors Affecting Relocation in Response to Reservoir Development. Lexington: University of Kentucky, 1970.
- Burdge, J.R. and R.L. Ludtke. "Social Separation Among Displaced Rural Families: The Case of Flood Control Reservoirs". Social Behaviour, Natural Resources and the Environment, [Edited by W.R. Burch]. 1973.
- Cameron, M.R. and F. Shefrin. Federal Agricultural Assistance Programs Canada 1900-1951. Ottawa: Canada Department of Agriculture, April, 1952.
- Cameron, M.R. Federal Agricultural Assistance Programs Canada, 1945-1956. Ottawa: Canada Department of Agriculture, February, 1957.
- Clemente, F. and G.F. Summers. "Industrial Development and the Elderly: A Longitudinal Analysis". Journal of Gerontology, [28(4)]. 1973.
- Cortese, C.F. and B. Jones. "The Sociological Analysis of Boom Towns". The Western Sociological Review, [8(1)]. Logan: Utah State University, 1977.
- Cortese, C.F. "Rapid Growth and Social Change in Western Communities", [Paper presented at the Seminar on the Social Consequences of Rapid Growth in Small Western Communities]. Gillette, Wyoming: February, 1979.
- Dinsmore, J.F. "Communities Have Social Resources Needed in Relocation". The Journal of Housing, [3]. 1966.

Donnermeyer, J.F., P.F. Korsching and R.J. Burdge. "An Interpretative Analysis of Family and Individual Economic Costs Due to Water Resource Development". Water Resources Bulletin, [10(1)]. February, 1974.

Dyck, D. "Adjustment Problems in Relocating New Brunswick Farm Families". Canadian Journal of Agricultural Economics, [VIII(2)]. 1960.

Feidelson, K. "A Total Approach to Family Relocation". Journal of Housing, [24]. 1967.

Fennia [Vol. 72]. [A general handbook on the geography of Finland]. Geographical Society of Finland (publishers), 1952.

Finlayson, Judith. "Company Towns Deadly for Wives". Edmonton: Edmonton Journal, April 21, 1980, pp. B-8.

Freudenburg, W.R. "The Effects of Rapid Population Growth on the Social and Personal Well-Being of Boomtown Residents", [Paper prepared for the Conference on Coping with the Impacts of Rapid Growth]. Scottsdale, Arizona: February, 1980.

Fried, M. "Grieving For a Lost Home". The Urban Condition, [L. Duhl (ed.)]. New York: Basic Books, 1963.

Fried, M. "Effects of Social Change on Mental Health". American Journal of Ortho-Psychiatry, [64]. 1964.

Fried, M. "Transitional Functions of Working-Class Communities: Implications for Forced Relocation". Mobility and Mental Health, [M. Kantor (ed.)]. New York: Van Nostrand, 1964.

Gill, D.S. and D.G. Murri. Red Deer River Flow Regulation Proposals Sociological Studies. Edmonton: Alberta Environment, 1974.

Gnandt, F.R. An Evaluation of Relocation in Urban Renewal, [Unpublished M.A. Thesis, University of Lethbridge]. Fall, 1976.

Goldstein, S. and B.G. Zimmer. Residential Displacement and Resettlement of the Aged. Rhode Island: Brown University, 1960.

Gray, R. "Community Impact of New Industry". Arkansas Economist. Spring, 1962.

Hartman, C. "The Housing of Relocated Families". The Journal of American Institute of Planners, [30]. 1965.

Hartman, C. "Displacement: A Not So New Problem". Social Policy, [9(5)]. March-April, 1979.

Higgins, J.M., Jr. The Effect of Landowner Attitudes on the Financial and the Economic Costs of Acquiring Land for a Large Public Works Project, [Unpublished M.Sc. Thesis]. Lexington: University of Kentucky, 1967.

- Institute for Social Science Research. Summary of A Comparative Case Study of the Impact of Coal Development on the Way of Life of People in the Coal Areas of Eastern Montana and Northeastern Wyoming. Missoula: University of Montana, August, 1974.
- Jobes, P.C. "Anticipating the Impact of Coal Development in a Rural Western Community: An Interpretation of Issues Through Scalogram Analysis", [Unpublished paper]. Missoula: Montana State University, 1979.
- Johnson, S. and R.J. Burdge. "An Analysis of Community and Individual Reactions to Forced Migration Due to Reservoir Construction". Water and Community Development: Social and Economic Perspectives, [D.R. Field et al (ed.)]. Michigan: Ann Arbor Science Publishers, 1974.
- Joyce, D., R.R. Mayer and M.K. Nenno. The Social Functioning of the Dislodged Elderly. Institute for Environmental Studies, University of Pennsylvania, December, 1966.
- Kalder, D. and M. Dahlke. Industrialization Efforts and Experiences in Iowa's Rural Communities. Center for Agriculture and Rural Development, Iowa State University, January, 1973.
- Kennedy, L.W. Social Interaction and the Desire to Move. Edmonton: Population Research Laboratory, University of Alberta, November, 1979.
- Kirk, D.W. A Study of the P.F.R.A. Administration: Based on Jacques Ellul's General Thesis With Regard to Technological Society, [Unpublished M.A. Thesis]. Regina: University of Saskatchewan, March, 1969.
- Kroll, M. "Relocation: Its Effects on People". Family Service Highlights, [18]. July, 1957.
- Larson, S.S. "The Elderly: Victims of the Energy Venture". The Boom Town: Problems and Promises in the Energy Vortex, [J. Davenport, III and J.A. Davenport (eds.)]. Laramie: University of Wyoming, 1980.
- Ludtke, R.L. and R.J. Burdge. Evaluation of the Social Impact of Reservoir Construction on the Residential Plans of Displaced Persons in Kentucky and Ohio, [Research Report #26]. Lexington: Water Resources Institute, University of Kentucky, 1970.
- Mattox, J.L. "Small City Relocation Program". The Journal of Housing, [3]. 1966.
- Mermin, A.A. Relocating Families: The New Haven Experience: 1956-1966. Washington, D.C.: National Association of Housing and Redevelopment Officials, 1970.
- Merskey, H. Interview in The Calgary Herald. Calgary: November 9, 1981, p. B-14.

- Millspauch, M. "Problems and Opportunities of Relocation". Law and Contemporary Problems, [26]. 1961.
- Moen, E. et al. Women and Energy Development Impact and Response. Boulder: University of Colorado, 1979.
- Moen, E. "Social Problems in Energy Boomtowns and the Role of Women in Their Prevention and Mitigation". The Boom Town: Problems and Promises in the Energy Vortex, [J. Davenport, III and J.A. Davenport (eds.)]. Laramie: University of Wyoming, 1980.
- Moen, E. "Public Planning and the Social Costs of Energy Production: Two Futures for Colorado". Energy Issues in Colorado's Future. Golden: Colorado Research Institute, 1980.
- Napier, T. "Social-Psychological Response to Forced Relocation Due to Watershed Development". Water Resources Bulletin, [8(4)]. August, 1972.
- Napier, T. Social Impact Assessment of Forced Relocation of Rural Populations Resulting From Planned Land Use Change, [Unpublished paper]. Department of Agricultural Economics and Rural Sociology, Ohio State University, November, 1975.
- Napier, T.L. and C.W. Moody. "The Social Impact of Forced Relocation on Rural Populations Due to Planned Environmental Modification". Western Sociological Review, [8(1)]. 1977.
- Napier, T.L. and C.J. Wright. An Evaluation of Forced Relocation of Population Due to Rural Community Development. Wooster, Ohio: Ohio Agricultural Research and Development Center, August, 1974.
- Napier, T.L. and C.J. Wright. A Longitudinal Analysis of the Attitudinal Response of Rural People to Natural Resource Development. Columbus, Ohio: Department of Agricultural Economics and Rural Sociology, March, 1975.
- Nephew, E.A. Brown Coal Surface Mining and Land Restoration in Germany: An Example of Enlightened Land Stewardship. Springfield, Virginia: National Technical Information Service, 1979.
- Niebanck, P.L. The Elderly in Older Urban Areas. Institute for Environmental Studies, University of Pennsylvania, 1965.
- Pastalan, L.A. "Involuntary Environmental Relocation: Death and Survival". Action Research in Man-Environment Relations, [E.H. Steinfeld (ed.)]. 1974.
- Parish, N.J. "The Residential Relocation Program Can Be Improved in Two Major Areas". The Journal of Housing, [3]. 1966.
- Putter, H. "Relocation Administration Programs". The Journal of Housing, [3]. 1966.

- Richardson, F.L.W., Jr. "Community Resettlement in a Depressed Coal Region". Human Organization, [1(1)]. 1941.
- Roper, R.E. Estimating the Stress of Relocation Upon Older Women, [Unpublished paper presented at the Third Illinois Health Care Research Symposium held in Chicago]. March, 1979.
- Roper, R.E. The Family Life Cycle, Stress and Relocation, [Unpublished paper]. Urbana: University of Illinois, May, 1980.
- Satterfield, M.H. "The Removal of Families From Tennessee Valley Authority Reservoir Areas", [Paper presented at the Southern Sociological Society Meeting in Birmingham, Alabama]. April 2, 1937.
- Sheehan, P. Social Change in the Alberta Foothills. Toronto: McClelland and Stuart Ltd., 1975.
- Sheehan, P. Personal communications. Edmonton: 1980.
- Shields, M.A. "Social Impact Studies: An Expository Analysis". Environment and Behavior, [7(3)]. September, 1975.
- Shields, M.A. "Grounded Theory Construction in Social Impact Assessment". Methodology of Social Impact Assessment, [K. Finsterbusch and C.P. Wolf (eds.)]. Pennsylvania: Dowden, Hutchinson and Ross, 1977.
- Warrence, S. "A Report on Relocation of the Elderly". Essays on the Problems Faced in the Relocation of Elderly Persons. Institute for Urban Studies. University of Pennsylvania, June, 1963.
- Weise, H. "Reclamation After Strip Mining: A Vital Means in Long-Term Development Planning in the Rhenish Lignite District, Germany". Ecology and Coal Resource Development, [M.K. Wali (ed.)]. New York: Pergaman Press, 1979.

APPENDIX 1

Compensation Procedures for Coal-Fired Electric Power Plants in Alberta

In Alberta, three statutes are of importance in a discussion of compensation procedures relating to coal-fired, electric power plants: The Surface Rights Act (1972), The Expropriation Act (1974) and the Hydro and Electric Energy Act (1971). While those statutes deal with many issues, the following provides a summary of those aspects of the three statutes which are pertinent to this discussion on displacement-relocation from coal-fired, electric power plants.

The Surface Rights Act established the formation of the Surface Rights Board to adjudicate on matters relating to the Act. In brief, the Surface Rights Act provides for a mechanism for adjudicating situations where the surface rights of an individual are transgressed by those of the larger society. For example, if government permission was received by a company to build a transmission or pipeline across property belonging to another individual, or to mine coal under that property, but the two parties disagreed over the price being offered by the company in compensation, the Surface Rights Board could adjudicate between the two, and make a decision enforceable by law. In those situations, the Board would have the ability to determine the amount of land required, as well as the level and type of compensation.

In its mode of operating, the Surface Rights Board carries out its business in the manner of a tribunal, rather than that of a court. The use of a lawyer is not essential (although it is becoming increasingly typical), the meetings of the Board are often at the location under

dispute rather than in a courtroom, and procedures are much more relaxed than those in a court of law. By design, the Surface Rights Board procedures were developed to allow lay people to present their case in a nonadversarial and effective manner. The essence of Surface Rights Board decisions are also more judgment calls than the definition of points of law in that the issues they deal with are complex, value laden and do not often involve the detail of legal technicalities which courts of law are required to adjudicate on.

Since 1972, revisions have been made to the Surface Rights legislation; Section 23, dealing with the determination of compensation was amended in 1973 and 1976.

The Hydro and Electric Energy Act (1971), with subsequent revisions, allocates the responsibility of adjudicating over surface rights and expropriation matters affecting electric power plants to the Surface Rights Board.

The Expropriation Act (1974), with its subsequent revisions, outlines the procedures for expropriation, and for compensation. Installations which are considered permanent, such as thermal electric power plants, fall under the provisions of the Expropriation Act and surface rights may be expropriated. The Surface Rights Act, by comparison, may legally allow only the temporary use of the land in cases where the landowner is otherwise unwilling to grant its use. In those instances, a right of entry may be granted by the Surface Rights Act. The title to the land, in those situations, though, remains with the landowner. As a result, a company, after obtaining government approval for the construction of a coal-fired, thermal electric power plant, if unable to purchase the required land, could apply to the

Surface Rights Board for expropriation of the property. In that instance, the Surface Rights Board would have the authority to adjudicate on the amount of land required (the company would need to justify its land requirements if questioned), and the level of compensation. Where some payment had already been received, the Board could order additional payment, if required.

In total, the interplay between the various statutes creates a complex situation. An essential factor is prior government approval of a development. If that is given, the procedures and authorities of the three statutes fall into play for a coal-fired, electric power plant.

The Surface Rights Board adjudicates in all surface rights matters, where an agreement cannot be reached between a landowner and a developer. If the land affected is to be used only for mining purposes, the Surface Rights Act is applicable. If the landowner wished to retain title to his land, legally he could; the company could apply only for a right of entry and use of the land.

For a neighbour across the road, affected by the power plant, the Expropriation Act and its procedures could be invoked. If that landowner wished to retain title, but the company also wished to obtain title, the Surface Rights Board could expropriate the land, determine compensation, and grant the land to the company.

Compensation procedures, methods of determining compensation, and types of costs which are to be included are different, according to which act is employed. So, the two neighbours, although functionally both losing their land, could also receive different types and levels of compensation.

Sections of the two statutes which deal with the determination of

compensation are: Expropriation Act, Sections 39 to 56 and Surface Rights Act, Section 23.

APPENDIX 2

LANDOWNERS AFFECTED BY CALGARY POWER LAND PURCHASE
1976 - 1980

NAME	AGE (approx)	FAMILY SIZE (approx)	OCCUPATION	FAMILY RESIDENCE PRIOR TO LAND PURCHASE	FAMILY RESIDENCE JANUARY/81	DATE OF LAND ACQUISITION
1. E. Lechner	30	4	farmer-construction worker	Keephill	Bruce	1976
2. E. Alberta	40	4	store manager	Keephill	Stoney Plain	1977
3. K. Gaschnitz	45	8	various-non farm	Edmonton	Edmonton	1977
4. N. Landsman	70	10	farmer-semi-retired	Keephill	Stoney Plain	1977
5. S. Porter	50	2	farmer-semi-retired	Keephill	Tomahawk	1977
6. G. Rosin	30	5	farmer	Keephill	Edmonton	1977
7. C. Shellton	20	1	n/a	Edmonton	Edmonton	1977
8. M. Steger	40	5	mechanic/businessman	Keephill	Victoria	1977
9. O. Albers	55	6	farmer-semi-retired	Keephill	Barrhead	1978
10. M. Moger(deceased)	65	n/a	farmer	Keephill	Edmonton	1978
11. I. Quigg	70	2	retired	Keephill	Edmonton	1978
12. W. Quigg	70	4	retired	Keephill	Stoney Plain	1978
13. G. Tinney	50	5	plant maintenance-farmer	Keephill	Duffield	1978
14. F. Beck	55	3	farmer	Keephill	Onoway	1979
15. J. Ewashko	40	3	plant maintenance	Keephill	Keephill	1979
16. N. Henkel	50	n/a	homemaker	Edmonton	Edmonton	1979
17. C. Landsman	30	4	plumber-farmer	Keephill	Onoway	1979
18. W. Landsman	30	n/a	n/a	Edmonton	Edmonton	1979
19. A. Quigg	60	2	retired	Keephill	Edmonton	1979
20. F. Quigg	40	n/a	n/a	Edmonton	Edmonton	1979
21. W. Pahai	n/a	n/a	n/a	Edmonton	Edmonton	1979
22. E. Wagner	50	8	plant operator-farmer	Keephill	Edmonton	1979
23. W. Clark	60	4	store owner	Keephill	Edmonton	1979
24. G. Gaschnitz	30	1	service station owner	Keephill	Edmonton	1979
25. H. Gaschnitz	50	1	consultants-university	Keephill	Edmonton	1980
26. Kupfer-Glick	40	6	instructors	Edmonton	Edmonton	1980
27. R. Leshar	40	4	farmer	Keephill	Edmonton	1980

Note: All information is approximate
: Keephill as used above includes Highvale

Sources: Calgary Power Ltd., 1981
: Keephill interviews

APPENDIX 3

Interview Topic Areas

1. General information

- (a) Demographics - age, sex, marital status, family phase, ages of children.
- (b) Location of children's residence; location of relatives.
- (c) Education - technical and academic.
- (d) Occupations - years of experience, off-farm work, trades and skills.
- (e) Previous geographic mobility - previous residences, length of time, travel.
- (f) Attachment to Keephills - length of residence, history, ties to the community: friends, family, neighbours, institutions, employment, groups and associations, economic ties (e.g. sharing of machinery, joint farming), feelings towards Keephills.

2. History of involvement with the project

- (a) First notification of the project.
- (b) First contact and reaction.
- (c) First notification of relocation and reaction.
- (d) Process and actions since notification.

3. Relocation process

- (a) Timing - when started, length of time, time for preparation, move, resettlement.
- (b) How - assistance: friends, relatives, neighbours, Calgary Power, Government.
- (c) Selection of the new residence - what criteria were used, how was the new one chosen.
- (d) Resettlement - knowledge of the new community, why chosen.

4. Relocation related effects

- (a) Economic -
 - i) compensation, fairness, adequacy
 - did it cover all costs?
 - what wasn't covered?
 - how do they define costs?
 - ii) costs at the new location
 - income, expenses changes
 - higher, lower or similar
 - types of additional or reduced costs
 - iii) changes in economic standing
 - generally
 - income and earnings foregone
 - iv) the manner in which compensation was established
 - acceptance of company offer
 - use of own appraiser
 - use of lawyer
 - use of expropriation or surface rights legislation

and procedures

- did going that route result in better compensation?

v) effects of inflation on compensation

- losses, erosion of capital before new land purchase

(b) Physiological

i) changes in physical health - situation at old location,
during move and in new location

ii) changes in the degree or frequency of illness

- external - biological

- stress related - headaches, ulcers

(c) Psychological

i) stress and anxiety (pressure)

- prior to relocation, during move, at new residence

- causes, financial problems, moving

ii) grief, longing for old residence, depression from loss of
home, farm, friends, social contacts, community life

iii) helplessness, powerlessness

iv) status change

- involvement in the community

- membership and leadership roles in organizations

v) insecurity, persecution, ambivalence

vi) alienation from community

vii) anger and hostility

(d) Social

i) roles and functions

- changes in family roles: wife, husband, children

- addition or deletion of roles and functions at the new

location vs. the old

- ii) status
 - changes from change in vocation
 - effects from loss of land
- iii) commitment to community
 - identification with Keephills-Highvale area
- iv) social participation and interaction
 - with family
 - within community - involvement and level of contact with others
- v) friendships and relatives
 - in Keephills - percentage before and after move
 - outside - percentage before and after move
- vi) social support mechanisms
 - informal - before and after
 - help from neighbours: work, illness, crisis
 - visiting
 - formal - services at old and new locations
- vii) politicization
 - change in level of involvement
 - more involvement before or after in community efforts?
 - if affected again, what would you do?
- e) Attitude towards company and government - before, during, and after relocation; changes; reasons.
- f) Attitude towards project - legitimacy, acceptance, effect upon vested interest - did it enhance or detract from your life situation?

- g) Attitude towards new residence and community - presence of friends, neighbours, good community to live in?
- h) Solutions or changes that are required - compensation: levels, determination, assistance in relocating: responsibility; roles and actions of Calgary Power; roles and actions of government.

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